



EARLY INDIAN INDIGENOUS COINS

Edited by
D. C. SIRCAR

*Carmichael Professor and Head of the Department of
Ancient Indian History and Culture,
University of Calcutta.*



UNIVERSITY OF CALCUTTA
1970



FIRST PUBLISHED... .. 1970

737.4954⁴

Ea 73

276642



BCV 3798

PRINTED IN INDIA

PUBLISHED BY SRI SIBENDRANATH KANJILAL,
SUPERINTENDENT, CALCUTTA UNIVERSITY PRESS,
48, HAZRA ROAD, CALCUTTA-19,

AND

PRINTED BY SRI M. PODDER AT THE SASADHAR PRINTING WORKS,
13/1, HAYAT KHAN LANE, CALCUTTA-9.

Price Rs. 12.00



CENTRE OF ADVANCED STUDY IN
ANCIENT INDIAN HISTORY AND CULTURE
UNIVERSITY OF CALCUTTA
LECTURES AND SEMINARS
No. VI-B (SEMINARS)
PART—I

CONTENTS

<i>Subject</i>	<i>Page</i>
Proceedings of the Seminar—First day	3
1. Currency and Exchange in Ancient India <i>by</i> Dr. S. K. Maity, Jadavpur University.	11
2. The First Coins : A Study in Evolution and Growth <i>by</i> Dr. U. Thakur, Magadh University, Bodhgaya.	21
3. Early Indigenous Coins of Northern India <i>by</i> Dr. A. N. Lahiri, Calcutta University.	48
4. Early Indigenous Coins of South India <i>by</i> Dr. Sm. B. Lahiri, Jadavpur University.	78
5. Negama and City Coins <i>by</i> Dr. J. P. Singh, Banaras Hindu University.	101
6. A New Type of Śrī-Śātakarni <i>by</i> Prof. S. B. Deo, Nagpur University.	111
7. Silver Coinage of the Śātavāhanas <i>by</i> Dr. A. M. Shastri, Nagpur University.	113
8. Maner Hoard of Indigenous Coins <i>by</i> Dr. S. P. Singh, Centre of Advanced Study in AIHC, Calcutta University. ...	120
9. Coin Devices on Clay Lumps <i>by</i> Dr. K. K. Thaplyal, Lucknow University.	127
10. Some Currency Problems of Ancient and Early Medieval South India <i>by</i> Dr. B. D. Chattopadhyaya, Calcutta. ...	131
11. Epigraphic Accounts of the Numismatic History of Bengal <i>by</i> Sri B. B. De, Gauhati University.	141
12. Ancient Indian Coin Hoards <i>by</i> Prof. D. C. Sircar, Calcutta University.	147
13. Numismatic Notes <i>by</i> Dr. S. Bandyopadhyay, Centre of Advanced Study in AIHC, Calcutta University.	154
INDEX	161



PREFACE

In the proceedings of the five series of our two days' annual inter-university seminars so far published, Parts I and II dealing with two different subjects have been clubbed together. This is not because there is any inseparable connection between the two subjects of the first and second days, but because one of the two parts would hardly have made a sizable volume in the earlier years. However, with the increasing popularity of the seminars, the number of papers contributed to the fifth series was more than double the number received five years previously for the first. In the series of our seminars held in February, 1970, the number of papers received for both the days was high enough to make it possible to publish Part I (Early Indian Indigenous Coins) and Part II (Social Life in Ancient India) of the proceedings separately as two Volume.

The papers have been arranged, as far as practicable, from a chronological point of view. All the papers read at the Seminars, however, could not be included in the volumes.

The proceedings have been drawn up from notes submitted by the reporters to whom my sincere thanks are due. In this matter, Dr. A. K. Chatterjee and Sm. K. Bajpeyi, Junior Research Fellows at the Centre, rendered me considerable help. The index of the volume has been prepared by Dr. Sm. Juthika Maitra, another Junior Research Fellow, and I am extremely thankful to her.

Centre of Advanced Study, Dept. of
Ancient Indian History and Culture,
Calcutta University, 51/2, Hazra Road,
Calcutta—19. August 26, 1970.

D. C. SIRCAR
Director

PART I
EARLY INDIAN INDIGENOUS COINS

Proceedings of the Seminar

First Day

Date : 26th February, 1970.

Time : 10-30 A.M. to 1 P.M. and
2 to 5 P.M.

Subject : Early Indian Indigenous Coins.

Place : Lecture Hall at the Department of
Ancient Indian History and Culture,
Calcutta University, 51/2, Hazra Road,
Calcutta-19.

Chairman : PROF. D.C. SIRCAR, Calcutta University.

Participants besides the Chairman :

- | | | |
|-----|------------------------------------|---|
| 1. | PROF. T. V. MAHALINGAM | Madras University |
| 2. | PROF. A. D. PUSALKER | Poona University |
| 3. | DR. SM. S. GOKHALE | Do. |
| 4. | DR. A. M. SHASTRI | Nagpur University |
| 5. | DR. SM. B. LAHIRI | Jadavpur University |
| 6. | DR. K. K. THAPLYAL | Lucknow University |
| 7. | DR. N. AHMED | Banaras Hindu University |
| 8. | DR. J. P. SINGH | Do. |
| 9. | DR. J. RAI | Gorakhpur University |
| 10. | SRI B. B. DE | Gauhati University |
| 11. | DR. A. N. LAHIRI | Calcutta University |
| 12. | SM. C. GUPTA | Do. |
| 13. | DR. S. BANDYOPADHYAY | Centre of Advanced Study
in AIHC, Calcutta
University |
| 14. | DR. S. P. SINGH | Do. |
| 15. | SRI A. K. CHAKRAVARTI | Sanskrit College, Calcutta |
| 16. | SM. M. MUKHOPADHYAY | Beltala Girls' School,
Calcutta |
| 17. | DR. B. D. CHATTERJEE
and others | Calcutta |

Reporters : DR. A. K. CHATTERJEE, DR. S. P. SINGH,
SM. K. BAJPEYI, SM. S. DAS and
SM. S. BANERJEE.

Morning Session

The seminar started at 10.30 A.M. Prof. D. C. Sircar welcomed the participants on behalf of the Centre of Advanced Study in Ancient Indian History and Culture, University of Calcutta. He then requested Dr. Sm. B. Lahiri to read her paper entitled 'Early Indigenous Coins of South India'. In her paper, Dr. Sm. Lahiri attempted a survey of South Indian coinage and dealt with the coins of almost all the royal dynasties of the South beginning with the Śātavāhanas. According to her, no foreign coins ever exerted any influence on South Indian coins and the North Indian coinage had also very little impact on them.

Dr. A. Mitra Shastri wanted to know whether Roman coins were actually current in South India. Dr. Sm. Lahiri replied that there is no definite evidence on the point ; but Prof. Sircar observed that any coin minted anywhere in the world became current in the markets of India on its entry into the country. Prof. Mahalingam also agreed that the Roman coins were in circulation in South India. Dr. Thaplyal opined that *Dināra* became a synonym of gold coin not only in North India, but also in the South. Dr. A. M. Shastri referred to the use of *Dināra* in the sense of 'money' of copper. Prof. Sircar observed that *Dināri-māṣaka* is used in the Nagarjunikonda inscriptions of the Ikṣvākus, and that even ten such coins were regarded as a good sum worthy of being deposited in a guild as a permanent endowment. Dr. B. D. Chatterjee said that there is no evidence to suggest the use of gold coin in South India before the 10th century A. D. so that Roman gold issues were not in circulation there in the early period. Prof. Sircar did not agree with this view. There was some more discussion on Dr. Sm. Lahiri's paper in which Drs. A. N. Lahiri, N. Ahmed and S. Bandyopadhyay took part.

Dr. A. N. Lahiri then read his paper entitled 'Early

PROCEEDINGS OF THE SEMINAR—FIRST DAY 5

Indigenous Coins of Northern India' in which he attempted a survey of North Indian coins beginning with the punch-marked issues. He discussed the early tribal coins and the coins of the Imperial Guptas and of other post-Gupta dynasties. Dr. S. P. Singh observed that the cup-shaped coins referred to by Dr. Lahiri may not be earlier than the ordinary punch-marked issues ; but Dr. Lahiri argued in favour of their earlier date. Prof. Sircar and Dr. Thaplyal found it difficult to be sure whether one group as a whole can be regarded as earlier than the other. Dr. Ahmed referred to the importance of archaeological excavations in this connection and supported the suggestion that the bent-bar coins found at Texila are earlier than the punch-marked issues found elsewhere. Regarding the Sassanian type coins referred to by Dr. Lahiri, Dr. Ahmed observed that such coins were first imitated in Rajasthan. Dr. Sm. B. Lahiri argued that the said coins were introduced by the Hūṇas. Dr. S. P. Singh said that, as the 'Purī-Kuṣāṇa' coins were found along with original Kuṣāṇa issues, they should be referred to an earlier date ; but Dr. Lahiri regarded them as later. Prof. Sircar said that the discovery of the so-called Purī-Kuṣāṇa coins along with Kuṣāṇa issues shows that the Kuṣāṇa coins were in circulation for a long time even after the fall of the Kuṣāṇas. Dr. S. Bandyopadhyay observed that Dr. Lahiri ignored the brass coins of the Guptas among which some issued by Candragupta II exhibit influence of the similar coins of the late Kuṣāṇa king named Basana, Basata or Pasata. Prof. Sircar said that some Gupta brass coins were discussed by C. D. Chatterjee in *JUPHS*.

Dr. A. M. Shastri then read his paper entitled 'The Initial Period of the Silver Coinage of the Śātavāhanas', in which he challenged Altekar's view regarding the attribution of a unique silver coin bearing the legend *raño Gotami* to Gautamīputra Yajña-Śātakarṇi, and attributed it to Gutamīputra Śātakarṇi,

thus giving the credit of initiating Śātavāhana silver currency to the latter monarch. Prof. Sircar said that the Śātavāhanas issued coins in lead, etc., in their own areas, but silver coins in imitation of the Śaka currency for territories conquered from the Śakas. He thought that Dr. Shastri's view is not improbable, but that Nahapāna's coins restruck by Gautamīputra Śātakarṇi may be the latter's silver currency meant for the erstwhile Śaka territories. Dr. Lahiri and Mrs. C. Gupta regarded Dr. Shastri's opinion as probable.

Dr. N. Ahmed then read his paper entitled 'Early Indigenous Coinage and Archaeological Evidence' in which he discussed the role of archaeology in numismatic studies. Dr. A. N. Lahiri said that the city issues preceded the regular Ayodhyā series of coins. Dr. Shastri considered Dr. Ahmed's contention regarding the importance attached to archaeological excavations in determining the date of certain coins as exaggerated. Dr. Lahiri said that stratigraphical evidence is reliable only in the undisturbed areas. Prof. Sircar agreed that the value of archaeological evidence rests on the accuracy of the excavators' reports and the correctness of the interpretation of the data. Dr. S. P. Singh said that the coins found from Kumrahar should be dated between 600 and 400 B. C. Dr. Ahmed remarked that the upper limit has not been fixed. Dr. Sm. S. Gokhale asked how far the archaeological evidence throws light on the economy of the people. Dr. Ahmed replied that the study of the early coins indirectly reveals that there was a brisk trade between India and the Roman empire and that silver was generally imported from outside. Dr. Shastri opined that silver was also indigenously produced in India. Prof. Sircar said that the lead coins of the Śātavāhanas were current in the market side by side with the silver punch-marked coins. He also believed that the introduction of legends in Indian coinage was due to foreign inspiration.

PROCEEDINGS OF THE SEMINAR—FIRST DAY 7

Dr. K. K. Thaplyal then read his note entitled 'Early Indigenous Coin-devices on Clay Lumps and Non-metallic Coinage', in which he discussed the symbols and motifs found on seals and other objects made of bamboo, skin, lac, palmyra leaf, etc. Dr. J. P. Singh regarded such coins mentioned by Buddhaghosa as primitive money. Dr. A. N. Lahiri said that the evidence supplied by Buddhaghosa cannot be taken literally ; but Prof. Sircar opined that, in the absence of any evidence to the contrary, one cannot reject Buddhaghosa outright. Dr. Thaplyal added that leather pieces must have resembled metallic issues. Dr. S. Bandyopadhyay wanted to know whether the leather pieces were utilised as medium of exchange. Dr. Thaplyal answered in the affirmative. Dr. D. R. Das observed that pearls were used as medium of exchange. The morning session concluded at 1 P. M.

Afternoon Session

The afternoon session began after lunch at 2 P. M. when Dr. B. D. Chatterjee read his paper entitled 'An Introduction to the Study of the Major Currency Problems in Early and Early Mediaeval South India', in which he discussed such problems as the gap in the coinage before the Cālukya period. Dr. N. Ahmed observed that the paucity of coins in the South might be due to the fact that precious stones were exchanged in that area for Western coins. Dr. J. P. Singh said that even in North India there is a coinage gap ; but Prof. Sircar remarked that the gap relates to particular regions or dynasties. He pointed out that, owing to the currency of large quantities of old coins and of cowrie-shells in the market, the moneyers and merchants did not feel the necessity of getting their bullion made into coins and that it was they who determined whether fresh money were required or not. He also referred to the manufacture of punch-marked coins by

Buddhaghosa who was a South Indian and flourished in the fifth century A. D. shortly before the rise of the Cālukyas before the middle of the sixth century. Prof. Sircar thanked Dr. Chatterjee for his interesting discussion on the value adjustment of the different series of coins, but observed that it is extremely difficult to be sure on the relative value of the various metals. Dr. S. Bandyopadhyay said that the value may have varied from place to place. He referred to the difficulty in determining the real meaning of *Suvarṇa-māṣaka* and *Dināra-māṣaka*.

The next paper was read by Sri B. B. De, his subject being 'A Study of the Epigraphic Accounts of the Numismatic History of Bengal'. Prof. Sircar observed that the conjecturally restored coin-name *Gaṇḍaka* and the still more doubtful *Kākinīyika* in the Mahasthan inscription would suggest the currency of very small coins. Dr. S. Bandyopadhyay said that the name of *Kākinī* occurs in the *Arthaśāstra* and *Aṅgavijjā*. As regards Sri De's suggestion that *hiraṇya* was the name of a coin, he observed that it meant cash or money as shown by Prof. Sircar. Dr. Thaplyal, however, supposed that it indicated a particular type of coin. Dr. N. Ahmed drew attention to the use of the name *Dināra* even after the adoption of the *Suvarṇa* standard by the Guptas. Dr. Bandyopadhyay and Prof. Sircar replied that the reference may be to the large number of old *Dināras* already in the market. As regards small coins, Dr. A. N. Lahiri remarked that very small silver pieces (4-5 grains) have been unearthed from Taxila. Dr. Ahmed also observed that some exceptionally small copper coins (2-3 grains) have been found from Rajghat. Dr. A. M. Shatri referred to some small coins (1 or 2 grains) found in U. P. Prof. Sircar said that even one grain of silver would be costlier than a *Gaṇḍaka* which was equal to four cowrie-shells only.

Dr. S. P. Singh then read his paper entitled 'Some Early Indigenous Coins from Maner'. Dr. A. N. Lahiri observed

that, since the paper was mainly descriptive in character, there need not be any discussion on it.

Dr. J. P. Singh then read a paper entitled 'The So-called Nigama and City Coins' in which he discussed the general characteristics of such coins found from Taxila, Kauśāmbī, Banaras, Ujjayinī, etc. Prof. Sircar did not accept Dr. Singh's view that the ancient Indian coins were State issues. He quoted Buddhaghosa to show that the State was not always the issuer of coins, though the moneyers usually obtained the State's permission to mint money. He pointed out that Buddhaghosa, while dealing with the symbols on the punch-marked coins, is silent on any sign indicating their issue by the State. At least some coins, he said, must have been issued by agencies other than the State. Dr. S. Bandyopadhyay remarked that even the *Arthasāstra* refers to the issue of private money. Dr. A. N. Lahiri doubted whether Buddhaghosa referred to punch-marked coins. But Prof. Sircar observed that nobody who has read Buddhaghosa carefully can have any doubt about it. Dr. S. Bandyopadhyay quoted the *Aṅgavijjā* to show that punch-marked coins were manufactured in the Gupta age. He also referred to the coins styled *Śreṣṭhi-Gambhuvaka-dramma*, etc., which were apparently issued by some moneyers. Dr. Ahmed observed that the issue of punch-marked coins was discontinued after the 3rd century A. D. and Dr. Thaplyal said that there is no exact Sanskrit word for punch-marked coins. Dr. Lahiri regarded *kārṣāpaṇa* as meaning coin only. Prof. Sircar did not agree with these views and referred to Buddhaghosa's mention of *Nīla-Kārṣāpaṇa* and *Rudradāmaka* which were certainly names of particular coins. Dr. Bandyopadhyay quoted the *Aṅgavijjā* to prove that this work, composed in the Gupta age, speaks of both old and new punch-marked coins. Dr. K. K. Dasgupta observed that *Kārṣāpaṇa* is used in the late *Nārada-smṛiti* to indicate South Indian silver coins.

Dr. S. Bandyopadhyay then read his first note entitled 'Coin-testing in Early Indian Records' in which he discussed literary and epigraphic evidences to prove that coin-testing was practised in ancient India. He observed that *aśuddha* coins were cut into pieces and rejected. Dr. A. N. Lahiri said that coin-testing was necessary in order to check forgery which was extensive. He further observed that the Rūpadarśaka was required to examine not the private coins (the existence of which he doubted), but the royal ones. Dr. Bandyopadhyay did not agree with this view and observed that coin-testing was also necessary for the determination of the value of old coins. Prof. Sircar agreed with this view.

Dr. Bandyopadhyay next read his other notes on 'Rūpa' and 'Citravicitra'. There was some discussion on them in which Dr. Thaplyal, Dr. S.P. Singh and Sri R.P. Majumdar took part.

Sri R. P. Majumdar then read his notes on 'Māṣa and Māṣaka' and 'Purāṇa as equivalent to Dramma and Kāhāpaṇa'.

The last paper of the day entitled 'Ancient Indian Coin-Hoards' was read by Prof. D. C. Sircar who dealt at first summarily with the help the study of hoards of coins render in the reconstruction of the political and cultural history of India and then discussed the causes that led to the burying of treasures in ancient India, on the basis of certain cases quoted from Indian literature. According to him, political unrest, robbers, absence of Savings Banks and difficulty in recovering one's money deposited with a banker, were the main factors behind the burying of treasures. Dr. S. Bandyopadhyay drew Prof. Sircar's attention to the short story entitled 'Sampattisamarpaṇ' by Tagore, which speaks of the hoarding of treasures. Dr. D. R. Das observed that the *Gāthāsaptasatī* refers to the hoarding of treasures. Dr. J. P. Singh mentioned in this connection Dr. R. C. Majumdar's paper, published in the Golden Jubilee Volume of the *Journal of the Numismatic Society of India*, on the subject of hoards of coins.

The afternoon session ended at 5 P. M. after Prof. Sircar had offered thanks to the participants.

I

CURRENCY AND EXCHANGE IN ANCIENT INDIA

S. K. Maity, Jadavpur University

In the palaeolithic period, the basis of subsistence was hunting and food-gathering, and the small groups of families or tribes used to domesticate animals for food and for other purposes. They were primarily the hunting-pastors and their relationship with other tribes was mainly hostile. They, thus, required no means of exchange for their daily life.

But in course of time the primitive society developed and the political and economic relationship among different groups of peoples and tribes gradually cropped up. They required means of exchange in their economic undertakings and the earliest transactions were confined to barter. Again, from the barter of goods, we come to the next stage when certain commodities of general value were used as standard media of exchange. At one stage, cows and food-grains were such media. These, of course, varied according to the society wherein they were circulated. For instance, horses suited better the military class. Hides of the animals killed were suitable media for the nomadic hunting tribes. Domestic animals like the cow were the appropriate measure of value for pastoral tribes like the Ābhīras. Perhaps the heaviest money ever used was the stone currency of the island of Yap in the South Pacific and the lightest, the feather money of the New Hebrides.¹ For centuries, salt money circulated among the natives of Ethiopia without being supplanted by the gold or silver coins of the traders with whom they came in contact. Again, in Homer, we find reference to the use of oxen as a standard of value.² In

1 *Encyclopaedia Britannica*, Vol. XV.

2 Gardner, *Ancient Greek Coinage*.

the laws of Rome, fines were assessed in terms of oxen. The cow was the standard of value in Rome, and, thus, came the word *pecunia* (meaning 'cattle' in Latin) to mean 'money'. The Frisians used to pay tributes to the Romans in hides of bulls. But later, bigger hides were demanded and this led to war between the two nations.³

But the use of the above standard of value gave rise to numerous difficulties. In the case of cows or oxen, variations in size or quality led to difference of value which varied with the age, size or milk-producing capacity of the animals. Thus, in the *Aitareya Brāhmaṇa*, a cow only one year old and immaculate was accepted as a standard price for purchases of a certain quantity of *soma*.⁴ But the want of coincidence was a great handicap in the fulfilment of social needs. There was another difficulty : how much of one commodity was to be exchanged for a specific quantity of another ? An elaborate table of ratios between different commodities to be exchanged would thus be needed. There is also the difficulty of dividing some goods such as a cow, a coat, a hat, etc., because, when they are cut into pieces in the process of sub-division, they lose their value.

Thus, the need of money arose for overcoming the above difficulties. Moreover, in the barter system, there is the problem of finding two persons whose disposable possessions mutually suit each others' want. "There may be many persons wanting things and many possessing those things wanted : but to allow an act of barter there must be a double coincidence, which will rarely happen."⁵ It is, however, true that 'a store of corn, a bag of gold dust, a carcass of meat may be portioned out and more or less may be given away in exchange for what

3 Del Mar, *History of Coinage*, Ch. I.

4 *Ait. Br.* (Martin Haug's trans.), p. 59.

5 Francis A. Walker, *Money*, London, 1891, p. 3.

is wanted. But the tailor may have a coat ready to exchange ; but it must exceed, in value, the bread which he wishes to get from the baker or meat from the butcher'.⁶

In order to remove the above difficulties and to have a portable and convenient standard, different metals were introduced in the field. Thus, gold, silver and copper, either in bar or in dust, were used as the media of exchange. And in course of time different stamps or marks were impressed on them by the issuing authorities. In Greece, the oldest coins were stamped with the figures of animals. Similarly, 'in some transactions, however, presumably those involving larger values, gold and copper in rings of a fixed weight, circulated as money, and stone weights were already marked with their equivalence in such rings. This ring-money is the oldest currency known. Silver was rare and more valuable than gold'.⁷

The Indus Valley people developed a highly civilized urban life. Their agriculture, animal-husbandry and industry were quite developed. Next to these activities came trade. Apart from overland caravans, the long coast-line and arterial rivers, now known to be within the Indus territories, are consistent with an appreciable trafficking by water. Archaeology and geology show that imports included gold from Southern India and Afghanistan, copper from Rajasthan or Afghanistan, turquoise from Iran, and a jade-like fuchsite probably from Southern India. Links with Mesopotamia may be noted and may be extended to include the Indus pottery and inlays from Akkadian levels (c. 2300 B. C.) at Tel Asmar.

"Sumerian and Akkadian cuneiform documents refer to a land called Dilmun or Telmun, which was regarded as an other-worldly paradise, a place 'where the sun rises' and, therefore, somewhere to the east of Sumer. It was also a substantial

6 *Ibid.*, p. 6.

7 J. H. Breasted, *A History of Egypt*, 2nd ed., pp. 97-98.

source of material goods. Thus, ships of Dilmun brought timber to Ur-Nanshe of Lagash about 2450 B.C. and the great Sargon about a century later records that shipping from Dilmun, Magan and Meluhha docked in his new capital Agade (not identified, though M. E. L. Mallowan has suggested the neighbourhood of Babylon). Other documents show that, in the twentieth century B. C., sea-farers were bringing to Ur in Southern Mesopotamia, gold, silver, copper, lumps of lapis-lazuli, stone beads, ivory combs, and ornaments and inlays, eye-paint, wood, and perhaps pearls (fish-eyes). Dilmun has commonly been identified with the island of Bahrein, which must, if so, have been a re-victualling and middleman station rather than a source. A. L. Oppenheim regards Meluhha as the Indus Valley...S.N. Kramer prefers to identify Dilmun itself with the land of Indus. Thus in one way or other the texts would appear to include references to an organised trade between Sumeria and the Indus Valley before and after 2000 B.C.”⁸

Lothal has produced one of those circular seals of steatite which are mainly reminiscent of the Indus civilization, but ‘was seemingly at home in the north-western half of the Persian Gulf (Bahrein, Failaka, Southern Mesopotamia) about 1900 B.C. and have so been named specifically ‘Persian Gulf seals’ (neither wholly Indian nor Sumerian in design). More recently a fresh examination of the Makran coast, on the northern flank of the Arabian Sea, has produced contributory evidence. By and large, therefore, an appreciable commerce may be postulated between the civilization of the Tigris-Euphrates and that of the Indus.”⁹

As Francis A. Walker points out, ‘the need of money

⁸ Mortimer Wheeler, *Civilization of the Indus Valley and Beyond*, Thames and Hudson, London, 1966, pp. 64-67.

⁹ *Loc. cit.*

comes from the fact of trade. Trade in the beginning assumes the form of direct exchange of commodity for commodity, what we call Truck or Barter. But trade cannot proceed far without serious obstacle to direct exchange'.¹⁰ This point is also further stressed by Jevons in his famous work, *Money and the Mechanism of Exchange*.¹¹ Similar was also the case with the Indus Valley people.

More than sixty sites have been discovered in and around the Indus Valley. Harappa in the Montgomery District in the West Punjab and Mohenjodaro in the Larkana District of Sind are the biggest and the most prosperous. The economic condition of the people was sound. Only a fertile land producing sufficient food for the people, a land having inland (both land and water) communication to facilitate trade and commerce, could give rise to such civilized cities. They must have used certain media of exchange in their foreign trade and in other financial transactions. Along with the monetary system, the barter system was perhaps in force.

More than 1200 seals have been found at Mohenjodaro and many hundreds have been discovered from other cities. They might have been used as a media of exchange or in connection with some other economic transactions. Quite a large number of baked clay triangles ('votive cakes') have been discovered frequently from drains,¹² and they were perhaps used as means of exchange, the basis of this hypothesis being that the use of stone money by some ancient peoples was not uncommon. Moreover, gold, silver and copper, either in bars or in dusts, perhaps served monetary functions. It is quite reasonable to think that such a great civilization could not develop without a money economy.

10 *Money*, London, pp. 1-2.

11 London, 1875, p. 3.

12 *Ibid*, p. 25. According to Wheeler, it was 'used for toilet purposes' though such a hard substance cannot be so used.

Many competent authorities, led by Mortimer Wheeler, now believe that Harappa was overthrown by the Aryans.¹³ In course of time the Aryans gradually occupied the whole of the Punjab and ultimately conquered the greater part of Northern India. They followed a mixed pastoral and agricultural economy, in which cattle played a predominant part. The farmer prays for increase of cattle, the warrior accepts cattle as booty, the sacrificial priest is rewarded for his services with cattle. It assumed the nature of currency, and values were reckoned sometimes in terms of cattles.¹⁴ A man's wealth was reckoned in terms of the number of cattle he possessed. The Aryans lived in villages and in a community. They also carried on trade and commerce to meet their daily necessities of life. Barter, the oldest means of exchange, was perhaps the usual method of trade ; but gold, silver or copper coins were also in use. For instance, Niṣka was originally a gold necklace. A number of square or round gold pieces were strung together into a necklace worn by both men and women. But an isolated piece of fixed weight and standard was afterwards used as coin. In the opinion of Macdonell and Keith, Niṣka originally denoted 'a gold ornament worn on the neck'¹⁵ as is shown by the epithet *Niṣka-grīva*,¹⁶ 'having a gold ornament on the neck'. Moreover, monetary use of the Niṣkas is also referred to in the *R̥gveda*, for a singer celebrates the receipt of a hundred Niṣkas and a hundred steeds.¹⁷ The use of Niṣkas as means of exchange is found in other works.¹⁸ A R̥ṣi praises king Vibhindu for giving him forty thousand coins on

13 A. L. Basham, *The Wonder that was India*, 1st ed., p. 28.

14 *Ibid.*, p. 35.

15 *RV*, II.33. 10 ; VIII. 47.15.

16 *Ibid.*, V. 19.3.

17 *Ibid.*, I. 126.2.

18 *AV*, XX. 127. 3 ; *Lāṭ. Śr. Sūta.*, IX. 9.20 ; *Sat. Brā.*, XI. 4.1.1.8 ; *Gopa. Brā.*, 1.3.6 ; *Vedic Index*, Vol. I, pp. 454-55.

one occasion and eight thousand on another.¹⁹ Again, Kakṣīvat praises his patron Bhāvayavya for the gift of 'one hundred kine in addition to one hundred Niṣkas as a reward for his services'.²⁰ Rudra is described by Gṛtsamada as wearing a neck-ornament of Niṣkas.²¹ The goddess Uṣā is invoked to take away the evils of bad dreams from those who wear Niṣkas.²² Similarly, in many passages of the *Atharvaveda*, the term Niṣka is used.²³ In one place, the gift of one hundred Niṣkas of gold is referred to.²⁴ There are many references to the Niṣkas as both jewellery and coins in the later Vedic literature. The *Aitareya Brāhmaṇa* describes a man bearing a necklace of Niṣkas.²⁵ There is description of one wearing a silver Niṣka in the *Pañcaviṃśa Brāhmaṇa*.²⁶ Similarly, the Jātakas mention the Nikkha.²⁷

Besides, Niṣka, the Manā is also mentioned in the Vedic literature. In the *Rgveda*, one Hotṛ prays, "Oh Indra, bring us jewels, cattle, horses, and Manās of gold."²⁸ Macdonell and Keith explain the word as 'desirable object'.²⁹ There were also silver coins including Niṣka and Rayi which were prevalent in the Vedic age.³⁰

Perhaps, lumps of gold (*hiranya-piṇḍa*) served the same purpose, since Garga mentions, among various gifts made to him, ten purses and ten lumps of gold along with ten horses and some other objects.³¹ Here the terms *kośa* and *hiranya-piṇḍa* are significant, the former probably indicating

19 *RV*, II. 33.10 ; VIII. 47.15.

20 *Ibid* , I. 126.2.

21 *Ibid.*, II. 33.10.

22 VIII. 47, 15 ; also V. 19.3.

23 *AV*, V. 14.3 ; V. 17.14.

24 *Ibid.*, XX. 131.8.

25 VIII. 22.

26 XVIII. 1.14.

27 IV. 460 ; VI. 246 ; also Pāṇini, V. 1.20 ; 1.30 ; 2.119.

28 VIII. 78.2 ; I. 173.2 ; IV. 33.2 ; X. 6.3.

29 *Vedic Index*, Vol. II, p. 129.

30 [*Rayi*=wealth (*ibid.*, p. 208).—Ed.]

31 *RV*, VI. 47.22-23.

purses full of gold or silver and the latter, a lump of gold. Numerous other references lead us to infer that gold and silver pieces of definite weight and standard were used by the people as media of exchange. Kennedy and Smith state that 'introduction, into India, of the use of coins, that is to say, metallic pieces of definite weight authenticated as currency by marks recognised as a guarantee of value, may be ascribed with much probability to the 7th century B. C. when foreign maritime trade seems to have been begun'.³² But foreign maritime trade starts as early as the Indus civilization, and the earliest punch-marked coins have no evidence of foreign influence. The Vedic Aryans seem to have, in course of time, developed a fairly advanced standard of socio-economic life, with abundance of gold, silver and copper and made monetary transactions involving loans on interest, trade and gifts. Different metallic coins (or dust or lumps) served these needs. Wilson states that the Hindus had coined money before the days of Alexander.³³

We have no evidence regarding the weight of Niṣka of the Vedic literature ; but the Smṛti works and the *Arthaśāstra* seem to have preserved the old tradition. Thus the weight of Niṣka, as stated by Viṣṇu, Yājñavalkya and Manu, was equal to four Suvarṇas,³⁴ i.e. $80 \times 4 = 320$ Kṛṣṇalas.

Besides Niṣka and Manā, we have mention of Kṛṣṇala and Śatamāna of gold and silver. The *Kāthkasamhitā* refers to the gold Kṛṣṇala (Hiranya-Kṛṣṇala).³⁵ Elsewhere, one Kṛṣṇala is said to have been given as a gift.³⁶ Moreover, gold and silver Śatamāna weighing 100 Ratis or 180 grains* and its sub-divisions were used as media of exchange. The lower deno-

32 *Imperial Gazetteer*, Vol. II, p. 135.

33 Trans. RV.

34 Manu, VIII. 135 ; Viṣṇu, IV. 10.

35 XI. 4.

36 *Taitt. Br.*, I.3.6.7 ; also *Taitt. Sam.*, II. 3.2.1 ; *Maitrāyaṇi Sam.*, II. 2.2.

* [There is no proof that the weight of the Śatamāna was 100 Ratis. The Śatamāna really weighed 320 Ratis.—Ed.]

minations of Śatamāna are Ardha-Śatamāna (half Śatamāna = 50 Ratis or 90 grains), Pāda-Śatamāna (one-fourth Śatamāna = 25 Ratis or 45 grains) and Pādārdha-Śatamāna (one-eighth Śatamāna also called Śāna = $12\frac{1}{2}$ Ratis or $22\frac{3}{4}$ grains).³⁷ The monetary use of Śatamāna is referred to in the *Śatapatha Brāhmaṇa*,³⁸ *Taittirīya Brāhmaṇa*³⁹ and *Vājasaneyi Samhitā*⁴⁰. Later authorities like Pāṇini,⁴¹ Manu⁴² and Yājñavalkya⁴³ also recognised the importance of the Śatamāna and other coins.

The system of barter along with metallic coins existed in the age of the epics. In the *Rāmāyaṇa*, it is known as *niṣkṛaya*.⁴⁴ Sometimes the price of a particular cow is referred to in terms of money. Viśvāmitra offered to barter a hundred thousand cows in an exchange for the gifted cow of Vasiṣṭha.⁴⁵ Moreover, in an agricultural society, the cows had great economic importance. Note how, along with ten lakhs of cows, king Daśaratha gave gold and silver to his priests.⁴⁶ The Dakṣiṇā or the sacrificial fee invariably included a large number of cows.⁴⁷ The boy Śunaḥśepa was purchased from his parents in exchange for a hundred thousand cows.⁴⁸ Thus, in view of the pastoral-agricultural pattern of the society and the abundance of cattle-wealth and the economic importance of cattle, the cow in some cases was accepted as the standard of value.

Niṣka being a popular coin, the king of Kekaya, on one

37 For a detailed discussion, vide D. C. Sircar, *Studies in Indian Coins*, p. 48, and D. R. Bhandarkar, *Ancient Indian Numismatics*, p. 55.

38 *Śat. Br.*, V. 4.3.24 and 26 ; V. 55 ; XII. 7.2.13 ; XIII. 2.3.2.

39 *Tait. Br.*, I. 7.6.2 ; I. 2.7.3.

40 *Vāj. Sam.*, III. 2.6.3 ; II. 3.11.5.

41 Pāṇini, V. 1.27.

42 Manu, VIII. 135-38.

43 *Rām.*, I. 14.48.

44 *Ibid.*, I. 53.9.

45 *Ibid.*, I. 14. 50-51.

46 *Ibid.*, I. 14. 48-49.

47 *Ibid.*, IV. 5.4.

48 *Ibid.*, I. 61.13.

occasion, gave away 2000 gold Niṣkas to Bharata.⁴⁹ In the Uttara-kāṇḍa, Rāma orders Lakṣmaṇa to remunerate Kuśa and Lava with 18,000 'golds', apparently Niṣkas, for their musical performance.⁵⁰ Rāma also offered 1000 Niṣkas to Suyajñā.⁵¹ These were definitely gold coins. In the epic, the word *niṣka* also signifies 'a necklace', because it often consisted of many Niṣka coins.⁵² The practice of stringing together some coins into a necklace is not uncommon in India even today. Another name of Niṣka was Suvarṇa* and ten crores of them were distributed by Daśaratha to the *ṛtviks*. Not only gold but also silver coins were used as means of exchange. Rajatas were silver coins and forty crores of them were given away to the priests.⁵³ Copper coins (*tāmra*) were apparently also in use.⁵⁴

737.4954
Ea 73

QCV 3798

49 *Ibid.*, II. 70.12.

50 *Ibid.*, VII. 94. 17-18.

51 *Ibid.*, II. 32.10.

52 *Ibid.*, V. 2.25.

*[For Niṣka=4 Suvarṇas, see above, p. 18.—Ed.]

53 *Rām.*, I. 14.51.

54 *Ibid.*, I. 23.20 ; I. 37.19.

II

THE FIRST COINS : A STUDY IN EVOLUTION AND GROWTH

Upendra Thakur, Magadh University, Bodhgaya

The birth of metallic currency in India was followed by a regular issue of coins in different parts of the country. We should, however, remember that true coins in the modern sense are not mentioned in any pre-Buddhistic Indian work, though 'circulating monetary weights were in use long before'.¹ This was the stage when metal had to be weighed in scales, and given for a purchase. There were different standards for the different metals of gold, silver and copper; but all these standards started from a fixed weight, viz., that of the *Raktikā* or *Kṛṣṇala* or *Guṇjā*, approximately 1.8 grains.² And these metallic pieces of fixed weight, which got into the market, became the first coins.³

Thus, the story of the first coins in India is as interesting as that of barter and exchange. The media of exchange and their replacement by metallic currency depend on the stage of social evolution. Since this was not uniform among all communities and in all localities the means of exchange necessarily varied even at the same time. The metallic currency, though born and brought up on the soil, later came

1 Rhys Davids, *Numismata Orientalia : Ancient Coins and Measures of Ceylon*, p. 3.

2 Manu, VIII. 134-37; Viṣ., IV. 7-13; Bṛ., X. 14 ff.; Nār., App., 158.

3 A. N. Bose, *Social and Rural Economy of Northern India*, Vol. II, p. 357. 'Coins were also sometimes made of lead (cf. lead *Kahāpaṇa* in the *Nidānakathā*), nickel (cf. coins of the Indo-Greek kings, Kṣudrakas and Mālavas), potin (cf. coins of the Andhrabhṛtya kings) and also wood, bamboo, palm-leaf or lac bearing the requisite impressions of *rūpa* (cf. Buddhaghōṣa). [Reference to the nickel coins of the Mālavas and Kṣudrakas appears to be wrong.—Ed.]

to be influenced by foreign coinage in matters of technique, size and execution. But, all the same, money, even at this time, regulated only a part of the business of the land.

The contention that with the emergence of metallic coins 'the older system of traffic by barter had entirely passed away never to return'⁴ is wrong as traffic by barter held its ground all through and it does prevail even now in this country. We have an instance of a dog being bought for a *Kahāpaṇa* and a cloak⁵ and that of a doctor being paid with 16,000 *Kahāpaṇas* together with two slaves, carriages and horses⁶ showing that barter and exchange, at the same time, were current among both the high and the low. Further, we are told that in the Punjab, in the time of Milinda (Menander), in a trader's shop, oilseeds and peas and beans could be either taken in barter for a small quantity of rice or peas or beans bought for a small price decreasing in order according to requirement.⁷ Moreover, a *Jātaka* story⁸ refers to an instance of rice being used as money suggesting thereby the continuation of non-metallic money side by side with metallic currency and barter.

Besides local transactions, barter was popular even in foreign trade as late as the age of the Antonines, according to whom, 'traders in India tell us that the Indians give their own wares in exchange for those of the Greeks without employing money, even though they have gold and copper in abundance'.⁹ The foregoing instances clearly show that barter and money-exchange were current side by side and were equally popular both in local transactions and foreign trade.

Currency was, in its first stage, a metallic medium of exchange of standard weight. It has been rightly suggested that

4 Rhys Davids, *Buddhist India*, p. 100 ; *Cambridge History of India*, Vol. I, p. 217.

5 *Jātaka*, Vol. II, p. 247.

6 *Vinaya*, Vol. I, p. 272.

7 *Milindapañho*, p. 341.

8. *Jātaka*, Vol. VI, p. 519 ; *CHI*, loc. cit.

9 *Pausanias*, III. xii. 3.

coins may be legitimately used in two senses : first, of pieces of metal bearing the stamp or mark of some person in authority as proof of their purity, 'and of their being of full weight', and second, of pieces similarly stamped 'but thereby acquiring a value beyond that of an equal weight of metal (by the mark of stamp implying a promise to receive the coin at higher than an intrinsic value)'...¹⁰ Much before coins in either of these senses were struck, there was a time in India when 'mere pieces of bullion without a stamp at all, or merely with some private stamps, were used as money'. The word *Kārṣāpaṇa* or *Kahāpaṇa* may mean either 'coin proper of the weight of a *Karṣa* or only such pieces of metal of that weight'. The latter was certainly its original meaning both in Sanskrit and Pali.¹¹ As we have said above, true coins in the modern sense are not mentioned in any Indian work before the Buddha. We have also shown that this was the stage when metals like gold, silver and copper, with varying standards starting from a fixed weight, were weighed and given in exchange for a purchase. We have an account of these different standards in Manu,¹² Viṣṇu,¹³ Nārada¹⁴ and others.¹⁵

Gold : 5 *Kṛṣṇālas* or *Raktikās* = 1 *Māṣa* ; (ii) 16 *Māṣas* = 1 *Suvarṇa* ; (iii) 4 *Suvarṇas* = 1 *Pala* or *Niṣka* ; (iv) 10 *Palas* = 1 *Dharaṇa*.

Silver : (i) 2 *Kṛṣṇālas* = 1 *Māṣaka* ; 16 *Māṣakas* = 1 *Dharaṇa* or *Purāṇa* ; 10 *Dharaṇas* = 1 *Śatamāna*.

Copper : 80 *Kṛṣṇālas* or *Raktikās* or *Kākanīs* = 1 *Kārṣāpaṇa*.

It may be noted that there is a controversy amongst scholars about the use of two types of metallic money—*Niṣka* and *Hiraṇya-piṇḍa*—prevalent in Vedic India.¹⁶ Views for

10 Rhys Davids, *loc. cit.*

11 *Ibid.*, pp. 3, 13.

12 Manu, VIII. 134-37.

13 Viṣ., IV. 7-13.

14 Nār., App. 58.

15 Bṛ., X. 14 f.

16 *Vedic Index*, Vol. I, pp. 454-55.

and against have been expressed by scholars while determining the nature of *Niṣka* as a legal tender in Vedic times. D. R. Bhandarkar, A. S. Altekar and others have expressed diametrically opposed views. On the basis of a verse in the *R̥gveda* describing Rudra as wearing a *Niṣka* which was *viśvarūpa*,¹⁷ Bhandarkar believes that it was a coin, and not merely a type of metallic currency,¹⁸ because *rūpa* in *viśvarūpa* denotes the symbol or figure on a coin.¹⁹ We have *rūpa* or *rūpya* in Pāṇini,²⁰ the *Kāśikā*,²¹ the *Mahāvagga*, its commentary by Buddhaghosa as well as the Hāthigumphā inscription of Khāravela²² and other works. But the meaning of the word varies and sometimes *rūpa* was a technical word for 'coin'. Moreover, in the Vedic literature *rūpa* has not been used in the sense of symbol or stamp as suggested by Bhandarkar, because neither the Vedic commentators nor the writers earlier than Buddhaghosa (5th century A. D.) have interpreted *rūpa* as a symbol. Even Kauṭilya uses the word in a different sense altogether. His *Rūpadarśaka* examined coins and regulated currency both as medium of exchange and as legal tender admissible into the treasury.²³ The *Lakṣaṇādhyakṣa* was, however, the mint-master whose duty was to examine the symbols or stamps (*lakṣaṇa*) on the coins,²⁴ suggesting clearly that *rūpa* meant a coin and *lakṣaṇa* a symbol or stamp.²⁵

The *Aṣṭādhyāyī*²⁶ also furnishes some important data in respect of the oldest coinage of India. As suggested by V. S. Agrawala, the general sense governing the *sūtras* is 'that of

17 *RV*, II. 33.10.

18 *Ancient Indian Numismatics*, pp. 67-69.

19 *Ibid.*, p. 68.

20 *Aṣṭādhyāyī*, V. 2.20 ; *AIN*, p. 123.

21 *AIN*, loc. cit.

22 *Ibid.*, pp. 126-27 ; Sircar, *Select Inscriptions*, p. 207.

23 *Artha.*, II, 12.30.

24 *Ibid.*, II. 12.27.

25 *JNSI*, Vol. XXII, p. 16.

26 V. I. 19-37.

tena krītam (purchased with that) and *tad=arhati* (worth that)'.²⁷

It has been said that the *Rgveda* uses *Niṣka* as a sort of currency for 'a singer celebrates the receipt of a hundred *Niṣkas* and a hundred steeds : he could hardly require the *Niṣkas* merely for the purposes of personal adornment. Later the use of *Niṣka* as currency is quite clear'.²⁸ Attention has been drawn to the *Śatapatha Brāhmaṇa* which refers to a *Niṣka* of gold,²⁹ and the *Jātakas* mentioning it as a gold coin.³⁰

In all, Pāṇini refers to the gold *Niṣkas* in three *sūtras*. In the first,³¹ *Niṣka*, like *Pāda* and *Māṣa*, is used in the sense of an article purchased for these coins. In the second,³² it denotes a transaction concluded for two or three *Niṣkas* for which the following special forms were applied : *dvi-niṣkam*, *dvi-naiṣkikam*, *tri-niṣkam*, *tri-naiṣkikam*, etc. In the third,³³ it is suggested that any one possessing one hundred *Niṣkas* was known as *naiṣka-śatika* and one having one thousand *Niṣkas* *naiṣka-sahasrika*. These titles given to particular individuals clearly indicate the degree of opulence (*ādhyabhāva*)³⁴ of the persons concerned. The practice is current even to-day ; cf. *Lākhpāti* and *Krorpāti*.

Similarly, in the *Mahābhārata*,³⁵ there is a reference to these two categories of people, consisting of 100 and 1,000 *Niṣkas*. In Patañjali's *Mahābhāṣya*, we come across *niṣka-dhana* (owner of one *Niṣka*) and *śata-niṣka-dhana* (owner of one hundred *Niṣkas*).³⁶ We are not in a position to determine

27 IV. 1. 37 ; Agrawala, *India as Known to Pāṇini*, p. 259.

28 *Vedic Index*, Vol. I, p. 455.

29 XI. 4.1.8.

30 *AIN*, p. 48.

31 V. 1. 20.

32 V. 1. 30.

33 V. 2. 199.

34 III. 2. 56.

35 *Mbh.*, Anuśāsana-parvan, 13.43.

36 *Mahābhāṣya*, Vol. II, p. 414.

exactly whether these *Niṣkas* were of gold or silver. It is here that the *Kāśikā* furnishes a positive clue when it declares that ordinarily the word *suvarṇa* was not added before *Niṣka* because the latter was already understood as a gold coin.³⁷ From the *Śatapatha Brāhmaṇa*,³⁸ it is clear that *Niṣka* used to be of gold, for we are told that the *Niṣka* offered to Svaiddāyana, the learned rival of Uddālaka, by the latter, was of gold. The *Kuhaka Jātaka*³⁹ also refers to one hundred *Niṣkas* of gold. The *Mahābhārata*⁴⁰ mentions that 108 *Niṣkas* of gold were taken to be the unit of wealth, and the *Vessantara Jātaka*⁴¹ declares that a thousand *Niṣkas* were demanded from Vessantara as the amount for the redemption of his son. The *Juṇha Jātaka* further refers to more than a thousand gold *Niṣkas*.

Niṣka probably had its sub-multiples too. D. R. Bhandarkar believes that *Pāda* was one of the sub-multiples of the gold *Niṣka* coin, and it is on this analogy that he further suggests that the twenty thousand *Pādas*, offered by king Janaka of Mithilā to the most learned Brāhmaṇa, were gold coins of this category,⁴² as is probably indirectly suggested by Pāṇini.⁴³ While it is likely that the *Pādas* given by Janaka might have been gold pieces, it is difficult to accept *Pāda* referred to in Pāṇini's *sūtra* in the same sense. As *Pāda* has been mentioned along with *Paṇa*, it may be suggested that the former is related to the silver *Kārṣāpaṇa*, in which series it is mentioned by Kauṭilya also.⁴⁴ On the other hand, Patañjali refers to *Pāda* as a sub-multiple of the gold *Niṣka* as is clear from the expressions *Paṇa-niṣka* and *Pāda-niṣka*.⁴⁵

37 *Kāśikā*, V. 2. 110.

38 XI. 4.1.8.

39 *Jātaka*, Vol. I, p. 375.

40 Droṇa-parvan, 67. 10.

41 *Jātaka*, Vol. VI, p. 546 ; Vol. IV, p. 434 ; *AIN*, pp. 48-49.

42 *AIN*, p. 60

43 V. 1. 34.

44 *Artha.*, II. 12.

45 Pāṇini, VI. 3.56 ; III.1.63. [*Paṇa-niṣka* is doubtful.—Ed.]

According to Manu⁴⁶ and Yājñavalkya,⁴⁷ a *Niṣka* is equal to four *Suvarṇas* or 320 *Ratis* showing thereby that a *Pāda-niṣka* is synonymous with *Suvarṇa*. But their relative weights cannot be determined precisely for the want of specimens of *Niṣka* or *Suvarṇa*. The *Kāśikā*⁴⁸ refers to *niṣka-mālā*, i. e. a necklace of *Niṣkas*, as indicative of wealth in coins (*hiraṇya-parimāṇa*). Thus it is clear that *Niṣka* was a gold coin, while *Pāda* was not always a sub-multiple of gold coins, but sometimes also of silver issues.⁴⁹ Altekar has identified some silver coins of the Paila hoard with the *Pāda* coins.⁵⁰ It may therefore be suggested that the *Pāda* was not an independent coin, but a fractional unit of *Śatamāna* or *Suvarṇa* or *Niṣka* as the literal meaning of the word would suggest.

Even during the Brāhmaṇic and Upaniṣadic periods, *Niṣka* was not recognized as a standard coin as it bore neither symbols, nor figures nor marks.⁵¹ As we have noted earlier, *Niṣka* constituted merely a unit of barter having fixed weight and value and was often given as sacrificial fees.⁵² This was also the case with *Hiraṇya-piṇḍas*. It was only in the age of the Jātakas⁵³ that *Niṣka* was accorded the status of a legal tender which came to be recognized as medium of exchange in commercial transactions.⁵⁴ Similarly *Hiraṇya-piṇḍa* also assumed the form of *Suvarṇa* of fixed weight and value during this period and later.⁵⁵

A word of doubtful origin, *Niṣka* bears some resemblance with the old-Irish *nasc* meaning 'a ring', and the Old High

46 VIII. 130.

47 Yāj., I. 365.

48 VI. 2.55.

49 A. S. Altekar, in *JNSI*, Vol. XV, p. 17.

50 *Loc. cit.*

51 *Ibid.*, pp. 15-16.

52 *Loc. cit.*

53 *Jātaka*, *loc. cit.*; Yājñavalkya, I. 365.

54 *Jātaka*, Vol. IV, p. 227; Manu, VIII. 27.

55 *Śat. Br.*, XII. 7.20.13; XIII. 2.3.2.

German *nusc* used in the sense of 'a bracelet'. Its Dravidian association is equally doubtful. Tamil *nakai* (jewel), Malayāli *naka* (jewel), Toda *naxy* and Hindi-Bengali *naga* may not be necessarily connected with Prakrit *nikkha*, and Sanskrit *niṣka*. Baffled by the word, grammarians took the easy resort to coining a root for it. The *Kāṣakṛtsna-Dhātuvyākhyānam*⁵⁶ lists *niṣk* from which only one word *niṣka* is derivable. The only inference that can be drawn from the philological study of the word, taking it to be of Indo-European origin, is that the word *niṣka* was used in the sense of a valuable ornament.

The *R̥gveda* has expressions like *niṣka-grīva*,⁵⁷ and *niṣkaṁ kṛṇavatā*,⁵⁸ indicating that it was a necklace, while *niṣkaṁ viśvarūpam*⁵⁹ points to the multiplicity of its forms. The *R̥gveda*⁶⁰ shows that *niṣka* indicated the pendant as well as the necklace consisting of pendants, whose weight and size were not mentioned.

However, in later traditions, both Sanskrit and Pāli, the weight of *Niṣka* is specified. According to Manu, a *Niṣka* is equal to four *Suvarṇas* (i.e. 560 grains or 320 *Rattis*) whereas, in Pali tradition, *Niṣka* weighs as much as fifteen *Suvarṇas* (i. e., 1200 *Rattis* or 2100 grains). Thus, there is no uniform tradition of the *Niṣka* weight standard. In fine, literature does not help us in exactly determining the weight and size of the *Niṣka* pendants.

About the shape, we have a solitary reference in the *R̥gveda*⁶¹ which describes a goddess wearing a necklace of cowries. In ancient world, the cowrie was copied in metal and its shape was imitated for fashioning dishes and spoons. One of its varieties was cast in gold and copper at Ur and Kish. In ancient times, as also in the present day Baluchistan,

56 1.4.12.

57 *RV*, V., 19.3.

58 *Ibid.*, VIII. 47.15.,

59 *Ibid.*, II. 15.10.

60 *Ibid.*, II. 126.2.

61 *Ibid.*, X. 114.3. [The interpretation is not certain.—Ed.]

it was deemed an efficacious fertility charm. That, in ancient times, the cowrie was cast in metal is corroborated by the terracotta sculptures of the Mother-goddess discovered at Mehi. As many as three specimens, illustrated by Stein,⁶² are be decked with cowries worn as pendants of a necklace of four cowries, reminding the Vedic goddess of the four-cowrie neckgear (*catus-kaparda*).⁶³

Describing a cowrie cast in metal, discovered in exploration at the proto-historic site of Guval near Rupar in the Punjab, V. S. Pathak suggested that it broadly corresponded to the weight of the Śatamāna or one hundred *Rattis*⁶⁴ and that it was fashioned out of three metals, viz. copper or iron superimposed by silver and gold.⁶⁵ The *Atharvaveda*⁶⁶ says : "From the sky let Harita, the yellow one, protect thee ; from the earth let that made of Ayas, the copper, protect ; and from the mist let Arjuna, the silver one, protect." Pathak is inclined to identify cowrie with *Niṣka* because (i) the cowrie design was used as a pendant in the necklaces during the early Vedic age ; (ii) the cowrie conforms to the Śatamāna standard, and (iii) the cowrie is discovered at a proto-historic site and bears an early symbol of *tṛvṛtta*.⁶⁷ It may be noted here that in India, as in many other parts of the world, the cowrie-shells are known to have been used as money from very early times. Fa-hien, who travelled in India about the beginning of the fifth century A. D., refers to the use of cowrie in Madhyadeśa for buying and selling commodities. The cowrie-shells were in use in different parts of the country as late as the second quarter of the present century.⁶⁸

62 *An Archaeological Tour in Gedrosia*, Pl. XXXI.

63 For details, see V. S. Pathak's paper 'A Note on Niṣka' submitted to the Seminar of the Annual Conference of the Numismatic Society of India, Gorakhpur Session, 1968-69.

64 [The Śatamāna really weighed 320 *Rattis* and not 100 *Rattis*. See the author's discussions below.—Ed.]

65 Pathak, *loc. cit.*

66 V. 28.9.

67 For details, see Pathak, *loc. cit.*

68 For other details regarding cowrie, see D. C. Sircar, *Studies in Indian Coins*, pp. 279 ff.

The later Vedic *Samhitās* and the *Brāhmaṇas* mention two denominations of metallic currency—*Śatamāna* and *Pāda* which have been interpreted differently. The mention of *Śatamāna* along with *Suvarṇa* has tempted D. R. Bhandarkar and others⁶⁹ to suggest that it was a gold coin, whereas D. C. Sircar⁷⁰ believes that the term *hiraṇya* in those days denoted both gold and silver, so that *Śatamāna*, like *Niṣka*, could be both of gold and of silver,⁷¹ rendering it impossible to guess the exact metal the *Śatamāna* was made of. It is true that we do not notice any distinction between the gold and silver *Śatamānas* in the later Vedic literature ; but in the *Vājasaneyī Samhitā*,⁷² the word *rajata* has been used for silver and this suggests that during that time at least there was probably no confusion about it since the terms *hiraṇya* and *rajata* in the Vedic literature itself clearly mark out the distinction between the two types of currency.⁷³

From the *Śatapatha Brāhmaṇa*,⁷⁴ it is evident that *Śatamāna* was also a gold coin. *Māna* in Vedic literature has been used as a measure of weight equivalent to the *Kṛṣṇala* or *Raktikā*.⁷⁵ The weight of the *Śatamāna* would therefore be 100 *Rattis*.

But, from other references in the same work, it seems that the *Śatamāna* was more properly related to silver coinage. The *Śatapatha Brāhmaṇa* says : "Gold and silver will be the fee for the sake of variety to correspond to the manifold forms of the deity, and the *dakṣinā* will be *Śatamāna* since a human being lives for one hundred years."⁷⁶ This is no doubt a definite reference to a silver *Śatamāna* coin of 100 parts, i.e., 100 *Ratti* weight. From *Manu*, however, it is clear that the silver

69 *AIN*, pp. 57-58 ; *JNSI*, Vol. XV, p. 16.

70 *JNSI*, Vol. XV, p. 157 ; *Studies in Indian Coins*, pp. 48 ff.

71 *JNSI*, Vol. XV, pp. 137-38.

72 *Vāj. Sam.*, XXIII. 37.

73 *JNSI*, Vol. XV, pp. 149, 159.

74 V. 5.5.16 ; VIII. 2.3.2.

75 *Vedic Index*, Vol. II, 152. [The conjecture is really baseless. See the author's discussions further below.—Ed.]

76 *SB*, XIII. 4.2.10.

Śatamāna was equal to ten *Dharaṇas* or 320 *Rattis* in weight ;⁷⁷ but no actual specimen of a silver punch-marked coin conforms to the extraordinary weight of 500 grains.⁷⁸

The heaviest silver punch-marked pieces discovered so far are the oblong bars from the Bhir mound at Taxila found along with two coins of Alexander the Great and one of Philip Aridaeus, 'fresh from the mint' and therefore assignable to about the middle of the fourth century B.C.⁷⁹ These coins have been connected with the Achaemenid *Siglos*, struck probably as double *Sigloi*, which, in view of the maximum weight of the Persian *Sigloi* (86.45 grains), compared with the weight of the coins under reference (ranging between 155.7 and 177.3 grains), seems untenable.⁸⁰ But in terms of an Indian weight standard, these oblong bars approximate to 100 *Rattis* or 180 grains weight, the heaviest one of 177.3 grains being equal to 98.5 *Rattis*. As the literal meaning of *Śatamāna* ('of the weight of 100 *Mānas* or *Kṛṣṇālas*')⁸¹ suggests, we may take the Takṣaśilā bent-bar coins as representing the ancient *Śatamāna* coins of silver.⁸² Kātyāyana (600 B.C.)* also mentions *Śatamāna* in a *vārttika* to regularise such formations as *adhyardha-śatamānam* (i.e., purchased for $1\frac{1}{2}$ *Śatamānas*) which naturally suggests that the *Śatamāna* was a current coin till the time of Kātyāyana.⁸³ These silver pieces bear symbols with regular orientation and were undoubtedly part of the oldest punch-marked currency.

Altekar, following V. S. Agrawala, suggests that 'some thin, large coins have been found in ancient Kosala, which weigh between 75 and 79 grains'. These, according to him, would be *Ardha-Śatamāna* while those of the Paila hoard weighing 44

77 Manu, VIII. 137.

78 V. S. Agrawala, *op. cit.*, p. 263.

79 *Loc. cit.*; Allan, *Catalogue* (AI), p. xiii; also pp. 1-2.

80 Durga Prasad, in *Science and Culture*, 1938, pp. 462-65.

81 *Vedic Index*, Vol. II, p. 152.

82 V. S. Agrawala, *op. cit.*, p. 264.

*[C. 350 B. C.—Ed.]

83 Cf. *Bhāṣya* on V. 1. 29.

grains would be quarter *Śatamāna* or *Pāda-Śatamāna*.⁸⁴ He also identified the group of fourteen broad thin coins now preserved in the Lucknow Museum,⁸⁵ weighing 42 grains, with the quarter *Śatamāna*.⁸⁶ The Sonapur hoard of silver punch-marked coins weighing 192 grains were also identified by him with *Pādārdha-Śatamāna* or *Śāna*.⁸⁷ V. S. Agrawala suggests that *Śāna* may be identified with *Aṣṭabhāga* or $\frac{1}{8}$ *Kārṣāpaṇa*,⁸⁸ mentioned in the *Arthaśāstra*, which would suggest that the whole gamut of sub-multiples associated with the silver *Śatamāna* was preceded by the *Kārṣāpaṇa* currency.

But the above identifications raise some doubt as regards the relation of *Śatamāna* coins with the long or oblong bent-bar issues of the Takṣaśilā hoard. The literary evidence makes it clear that the shape of the *Śatamāna* was round (*pravṛtta*)⁸⁹ instead of being oblong or long. Karka, the commentator of the *Kātyāyana Śrautasūtra* also describes the *Śatamāna* as round in shape.⁹⁰ Moreover, the *Śatamāna* is said to have been the common currency prevalent in Northern India ; but the silver bent-bar coins have been found only in the Takṣaśilā region. Further, the identification of the sub-multiples of *Śatamāna* with the coins of the Paila hoard and with those found in the Gangetic valley poses yet another problem : how is it that while the *Śatamāna* has been found in Takṣaśilā, its sub-multiples have been found only in the Gangetic valley ? In other words, the above identifications are not very convincing although the possibility of these coins being related cannot altogether be ruled out.

Besides the *Śatamāna*, reference to *Śāna* is also found in Pāṇini. He refers to a range of prices in terms of *Śāna*.⁹¹

84 *JNSI*, Vol. XV, p. 21.

85 Durga Prasad, in *JASB*, Vol. XLV, N.S., pp. 9-12.

86 *JNSI*, Vol. XV, p. 21.

87 *Loc. cit.*

88 *Ibid.*, Vol. XIV, p. 25.

89 *Sat. Br.*, V. 4.3.24; V. 4.3.26.

90 Karka on *KSS*, XVI. 181—*vṛtt-ākārau Raktikā-Śatamānau*; cf. Altekar, in *JNSI*, Vol. XV, p. 16; Bhandarkar, *Anc. Ind. Num.*, pp. 156-57.

91 *Aṣṭādhyāyī*, V. 1.35-36

(such as 2 *Śānas*, 3 *Śānas*, etc.) to which Patañjali adds *pañca-śānam* and *pañca-śānyam*.⁹² All this definitely shows the popularity of *Śāna* in those days. In Pāṇini⁹³ again, *Śāna* is also mentioned as a *parimāṇa*, i.e. weight ; but such examples as *dvai-śāna* (purchased for 2 *Śānas*), etc., clearly show that it was the name of a coin. Caraka⁹⁴ also refers to *Śāna* as a weight equal to one-fourth of a *Suvarṇa* or *Karṣa*, i.e., 20 *Rattis*. It is suggested that this may have been a gold *Śāna* ; but we are not sure about it. The *Mahābhārata*,⁹⁵ however, says that the *Śāna* was a real silver coin, being one-eighth of a *Śatamāna*. Its weight therefore may be taken to be $12\frac{1}{2}$ *Rattis* or 22.5 grains.⁹⁶

Suvarṇa was yet another coin prevalent in ancient times. Although Pāṇini does not directly name it, the same is implied in a *sūtra*⁹⁷ which refers to a person's wealth in terms of coined gold.⁹⁸

We have reference to *Suvarṇa* in Kauṭilya's *Arthaśāstra* which mentions it as a weight being equal to one *Karṣa* or 80 *Guṇjās* or 140 grains.⁹⁹ No specimens of punch-marked *Suvarṇa* have been found so far ; but the theoretical weight as mentioned in Kauṭilya is confirmed by the *Suvarṇa* coins of the Gupta period struck after an indigenous weight standard.¹⁰⁰ The examples such as *dvi-suvarṇa-dhana*, *adhyardha-suvarṇa*, *dvi-suvarṇa* (purchased for $1\frac{1}{2}$ or 2 *Suvarṇas*),¹⁰¹ etc., make it

92 Vol. II, p. 350.

93 VII. 3.17.

94 Quoted by V. S. Agrawala, *op. cit.*, p. 264.

95 *Āraṇyaka-parvan*, 134.14.

96 *JNSI*, Vol. XIV, pp. 22-26. [The real weight of the *Satamāna* being 320 *Rattis*, the *Śāna* weighed 40 *Rattis*. See the author's discussion below.—Ed.]

97 V I.2.55—*hiraṇya-parimāṇam dhane*.

98 Cf. *dvi-suvarṇa-dhanam* (*Kāśikā*)

99 Quoted by V. S. Agrawala, *op. cit.*, p. 261.

100 *Loc. cit.*

101 Pāṇini, V. i. 29 (*Kāśikā*)

clear that, though sometimes used also as weight, *Suvarṇa* was a coin with the weight of a *Karṣa*. But when the words *hiraṇya* and *suvarṇa* are associated, the former denotes bullion and the latter coined gold.¹⁰²

In another place, Pāṇini refers to pieces of gold equal to a standard weight.¹⁰³ The *Kāśikā* by citing such examples as *hāṭako niṣkaḥ*, *hāṭakam kārṣāpaṇam*, shows that these pieces were gold coins, also called *Niṣka* and *Kārṣāpaṇa*, struck to a standard weight. We have no mention of gold *Kārṣāpaṇa* elsewhere and “*Kāśikā*’s reference is either to *Suvarṇa* coins of one *Karṣa* weight, or to the much later gold coins of the *Kedāra Kuṣāṇas*, also referred to in it as *Kedāra*.”¹⁰⁴

Although the above references support the existence of a gold currency, not a single specimen of gold punch-marked coins of any denomination has been found so far. Patañjali’s reference to the purchase of two *droṇa* measures of corn with gold sufficient for it or to the purchase of one thousand horses with the amount of gold sufficient for it¹⁰⁵ possibly points to gold currency, though nothing can be definite for want of positive evidence.

We have reference to *Suvarṇa-māṣaka* in literature, although specimens of only silver and copper *Māṣas* are known. We are told that the *Māṣa* coin in gold and copper weighed 5 *Rattis* and in silver 2 *Rattis*.¹⁰⁶ In the *Udaya Jātaka*, we have mention of a gold dish containing *Suvarṇa-māṣakas*, a silver dish containing the same and a copper dish containing silver *Kahāpaṇas*. The interesting thing is that all the three have been mentioned in order of their diminishing value.¹⁰⁷ From this it may be deduced that a silver *Kārṣāpaṇa* (32

102 Cf. *hiraṇya-suvarṇa* in the *Jātakas*; also *Arthaśāstra*, V. 2; p. 245; *AIN*, p. 51.

103 IV. 3. 153.

104 V. 2. 120; V. S. Agrawala, *op. cit.*, p. 262.

105 *Bhāṣya* on II. 3.18; I, p. 452.

106 *Arth.*, 11.18; p. 103; *AIN*, p. 52.

107 *Udaya Jātaka* (*Jātaka*, Vol. IV, pp. 106-08).

Rattis) was lower in value than a gold *Māṣaka* (5 *Rattis*) and hence the conclusion that gold and silver were related in the ratio of about one to seven during the period.

From the above discussion, it is clear that, during the Vedic period, *Niṣka*, *Śatamāna*, *Pāda* and *Suvarṇa* were the different denominations of gold, silver and copper coinage and their significance in the history of the evolution of Indian coinage is unique. But, their place in the field of commerce cannot be ascertained with certainty. The most interesting aspect of these coins is that they are hardly referred to in the context of commerce. Wherever they are mentioned, they have the character of a sacrificial fee or gift, and very often a reward for religious, social and academic accomplishments.¹⁰⁸ The metal pieces had no doubt socio-economic significance as they were mostly gifts from the kings, so that people had confidence in their intrinsic value.¹⁰⁹ In the post-Vedic period, however, some of these forms of metallic money such as *Niṣka* and *Suvarṇa* became the popular media of exchange as is evident from the fact that most of these metallic pieces are mentioned in commercial contexts in the *Jātakas*.¹¹⁰ Further, Pāṇini's reference¹¹¹ to *Niṣka*, *Suvarṇa*, *Māṣaka* and *Śatamāna* clearly shows that the people by this time had adopted gold and silver money as medium of exchange for highly priced commodities. In ordinary commercial transactions, however, copper pieces also came to be used as money.

The popularity of *Niṣka*, as a metallic money of a definite weight and value, increased somewhat in later periods when we find people counting wealth (*dhana*) in terms of *Niṣka*¹¹² which

108 *JNSI*, Vol. XV, p. 17.

109 *Loc. cit.*

110 For instance, *Māṣa*, *Suvarṇa*, *Niṣka*, etc. Cf. *Jātaka*, Vol. IV, pp. 97, 460, 106; Vol. V, p. 164; Vol. VI, pp. 69, 186.

111 Cf. *Aṣṭādhyāyī*, V. 1.37; V. 1.62; *AIN*, p. 45.

112 Cf. *Aṣṭādhyāyī*, V. 1. 30; V. 2.119; *Mbh.* (Anuśāsana-parvan), 13.43; *Mahābhāṣya* on V. 3. 55; *JNSI*, Vol. XV, p. 28.

came to be regarded as a gold¹¹³ coin, though sometimes its value was over-estimated.¹¹⁴

It is difficult to determine the exact relative position of the *Śatamāna* with the gold *Niṣka* on the authority of Manu, Yājñavalkya and other ancient works. As we have shown earlier, the mention of this coin called *Śatamāna* has been made in Kātyāyana's *Śrautasūtra*,¹¹⁵ Pāṇini's *Aṣṭādhyāyī*,¹¹⁶ Kātyāyana's *Vārttika*,¹¹⁷ *Śatapatha Brāhmaṇa*,¹¹⁸ *Taittirīya Brāhmaṇa*¹¹⁹ and *Vājasaneyi Saṁhitā*.¹²⁰

D.C. Sircar, after a critical analysis of the literary data, has come to the conclusion that *Śatamāna* is based on a Nonaryan weight system which was adopted at a fairly early date in the economic life of the Aryans.¹²¹ As in other fields, the Aryans borrowed from the Nonaryans certain weight systems in the field of monetary calculation such as 16 *Māṣas* making 1 *Purāṇa-Dharaṇa-Kārṣāpaṇa*, 16 *Paṇas* making 1 *Kāhaṇa* and 16 *Annas* making 1 *Rupree* which may easily be traced to the 'use of the multiple of 16' by the prehistoric people of the Indus Valley who were Nonaryans.¹²² Thus, if an elaborate system of silver currency based on the weight standard of the *Śatamāna* was really prevalent in any part of ancient India, the weights of those pieces were really as follows : (i) *Śatamāna* = 320 *Rattis* (585.6 grains) ; (ii) $\frac{1}{2}$ *Śatamāna* = 160 *Rattis* (292.8 grains) ; (iii) $\frac{1}{4}$ *Śatamāna* = 80 *Rattis* (146.4 grains) ; (iv)

113 *Jātaka*, Vol. I, p. 375 ; *Mbh.* (Droṇa-parvan), 67.3 ; *Kāśikā*, V.2.19 ; *AIN*, p. 28.

114 Cf. *Mbh.* (Droṇa-parvan), 67.10 ; *JNSI*, Vol. XV, p. 28. For a different view, see V. S. Agrawala, *op. cit.*, pp. 259-60.

115 XV. 181-83.

116 V. 1. 27.

117 On Pāṇini, V. 1. 29.

118 V. 4.3.24 and 26 ; V. 5.5.16 ; XII. 7.2. 13 ; XIII. 2.3.2 ; in one case described as *vṛtta* or round.

119 1.7.6.2. ; 1.3.7.3.

120 III. 2.6.3 ; 11.3.11.5.

121 Sircar, *Studies in Indian Coins*, p. 55 ; cf. Piggot, *Pre-historic India*, p. 282.

122 Sircar, *loc. cit.*

$\frac{1}{8}$ *Śatamāna* (also called *Śāna*) = 40 *Rattis* (73.2 grains) ; and
(v) $\frac{1}{16}$ *Śatamāna* ($\frac{1}{2}$ *Śāna*) = 20 *Rattis* (36.6 grains).

From the above, it will be seen that $\frac{1}{4}$ *Śatamāna* actually weighed 80 *Rattis* or one *Karṣa*, i.e. 146.4 grains. On the authority of the *Arthaśāstra*, *Amarakoṣa* and its commentary regarding the weight of the silver *Kārṣāpaṇa*, Sircar rightly points out : “it is clear that the silver *Kārṣāpaṇa* weighing 146.4 grains (or slightly less as indicated by the *Arthaśāstra*) was known in some parts of the country at least theoretically, although we have no silver punch-marked coins of this weight. The very name *Kārṣāpaṇa* (i.e. a coin weighing one *Karṣa*), applied to the silver coin, also suggests that its original weight, even if theoretical, was 80 *Rattis*.”¹²³ This shows that the *Śatamāna* was not entirely unrelated to the *Kārṣāpaṇa* as it was originally four times a *Kārṣāpaṇa*, while the later silver *Purāṇa* was $\frac{1}{8}$ of it in weight. “The silver *Māḍhas* (40 *Rattis*) of mediaeval Orissa prove the genuineness of the tradition regarding the silver *Kārṣāpaṇa* weighing 80 *Rattis*.”¹²⁴ Although the designation of a unit of one hundred *Rattis* was not unknown in India, it was not styled *Śatamāna*. While various weights of *Karṣa* are mentioned in ancient Indian literature, it was also sometimes regarded as weighing 100 *Rattis*, which is further clear from Buddhaghosa’s *Samantapāsādikā*.¹²⁵ The general belief that the *Śatamāna* was a coin weighing one hundred *Rattis*,¹²⁶ therefore, does not seem to be correct.

The meaning of the word *hiraṇya* in Vedic literature is also not very clear. It literally means gold ; but it has also been used to indicate ‘silver’ in many places. “Gold is described sometimes as *harita*, ‘yellowish’,¹²⁷ sometimes as *rajata*,

123 *JNSI*, Vol. XIV, p. 131 ; *Studies in Indian Coins*, pp. 55-56, 77.

124 *Studies in Indian Coins*, p. 56.

125 *Loc. cit.*

126 Cf. *JNSI*. Vol. XV, Part I, pp. 1 ff., 30, 60, 63, 'etc. For detailed discussion, see *Studies in Indian Coins*, pp. 56 ff.

127 Cf. *Kāthaka Saṁhitā*, X. 4 ; *Śat. Br.*, XII. 4.4.6 ; *Saḍ viṁśa Br.*, II. 9.

'whitish'¹²⁸ when 'silver' is alluded to."¹²⁹ Moreover, "*Rajata* as an adjective with *hiranya*¹³⁰ designates 'silver', and ornaments (*rukma*),¹³¹ dishes (*pātra*)¹³² and coins (*niṣka*)¹³³ 'made of silver' are mentioned."¹³⁴ Such being the variations in meaning, it is not safe to suggest that the word *hiranya* always means 'gold' in Vedic literature.* Further, the references to silver *Niṣkas* in the *Pañcaviṃśa Brāhmaṇa* and to silver *Śatamāna* in the *Kātyāyana Śrautasūtra* contradict the view that 'there is no reference to any silver currency in the Vedic literature'.¹³⁵ In fact, traces of the use of *Niṣkas* as a sort of currency are to be seen as early as the *Rgveda*¹³⁶ although currency is often confused with coin. It seems that *Niṣka* and *Śatamāna* were different names of both the gold and silver currencies weighing 320 *Rattis*.¹³⁷ In other words, *Śatamāna*, also called *Pala* and *Niṣka*, was 320 *Rattis* in weight, and not 100 *Rattis* as generally supposed, and *Śāna*, one-eighth of the *Śatamāna*,¹³⁸ weighed 40 *Rattis*, i.e. one-half of a *tolā* of 80 *Rattis*.¹³⁹

On the basis of an exhaustive study of the literary and archaeological data, Sircar has classified the different traditions regarding the weight of the *Śāna* and put the modifications of the *Śāna* weight in the following chronological order :

(i) The *Śatamāna* was 320 *Rattis* in weight while the *Śāna*

128 Cf. *Taitt. Sam.*, 1.5.1.2; *Śat. Br.*, XII. 4.4.7; XIII. 4.2.10, etc.

129 *Vedic Index*, Vol. II, p. 505.

130 Cf. *Taitt. Samhitā*, 1.5.1.2; *Kāthaka Samhitā*, X. 4; *Satapatha Br.*, XII. 4. 4.7.

131 Cf. *Śat. Br.*, XII. 8.3.11.

132 Cf. *Taitt. Br.*, II. 2. 9. 7; III. 9. 6. 5.

133 *Pañcaviṃśa Br.*, XVII. 1.54.

134 *Vedic Index*, Vol. II, p. 21.

*[The author's view seems different at p. 30 above.—Ed.]

135 *JNSI*, Vol. XV, Part I, p. 21.

136 Cf. 1. 126. 2; *Vedic Index*, Vol. I, pp. 454-55.

137 Sircar, *op. cit.*, p. 60.

138 *Mbh.*, III. 134. 15.

139 For details, cf. Sircar, *op. cit.*, pp. 61 ff. A recent writer on the subject clings to the older view about *Śatamāna* being of 100 *Rattis*, without advancing any new arguments (B. Srivastava, *op. cit.* [sic.—Ed.], pp. 165-68).

was one-eighth of it and weighed 40 *Rattis* according to the *Mahābhārata* and the early Dharmaśāstra writers, which is also supported by the *Śabdamālā* and *Vaidyakaparibhāṣā* as well as a tradition quoted in Gaṅgādhara's commentary on the *Carakasamhitā*.

(ii) The *Śāna* weighed 32 *Rattis* and was one-tenth of a *Pala* (i.e., *Śatamāna* according to the early Dharmaśāstra writers) according to the Kalinga system of measurement as referred to in the *Bhāvaprakāśa*.

(iii) The *Śāna* weighed 24 *Rattis* as is evident from the *Śārṅgadharasamhitā* as well as the Magadha system of measurement mentioned in the *Bhāvaprakāśa*.

(iv) The modified *Śna* weighed 20 *Rattis* according to Keśava's *Kalpadrakoṣa* and Yādavaprakāśa's *Vaijayantī* while, according to the latter, the modified *Śatamāna* weighed 160 *Rattis* only.¹⁴⁰

The above order suggests that the decrease in the weight of the *Śāna* from the original 40 *Rattis* to 32 *Rattis*, 24 *Rattis* and 20 *Rattis* resulted probably from the modification in the weight of the standard silver or gold coin in various parts of the country.¹⁴¹

Though the monetary significance of *Niṣka* and *Śatamāna* is controversial, the use of the *Kārṣāpaṇa* or punch-marked coins, the earliest indigenous coins of India, is almost an established fact since 600 B. C. These were the private issues in the beginning and as such may be taken to be the precursors of regular State money. The issue of coins naturally obviated the difficulties arising out of the obvious defects of the metallic currency. It was no doubt still a piece of metal, but with a changed face that had now the guarantee of the authority as regards its purity and weight. The commercial community was very much benefited, because it was the merchants who suffered in the course of their business transac-

140 Sircar, *op. cit.*, pp. 66-69.

141 For details, see *ibid.*, pp. 62-72.

tions. The dawn of this new era in the world economy was made possible by the initiative of the merchants or money-changers who affixed punch-marks to the coins passing through their hands in order to obviate the necessity for repeated weighing and testing.¹⁴² The growing circulation of monetary weights and the realisation of their usefulness by the civil authorities were largely responsible for the punch-marks being now the chief concern, not of private dealers, but of local authorities in a district or town.

In the post-Vedic period, the *Kārṣāpaṇa* emerges as a new class of coins seen for the first time in Pāṇini and the Pāli canon. Like other coins, it at first meant the metal weighing 146 grains. Probably, the unit of current money in Buddhist times was the bronze *Kahāpaṇa* and there are passages which seem to refer to gold coins as the expression 'peny weights of gold'.¹⁴³

Suvaṇṇa and *Kahāpaṇa* are distinguished in one of the Jātakas,¹⁴⁴ and lead *Kahāpaṇa*¹⁴⁵ is spoken of.

The identification of *Kahāpaṇa* with copper pieces in a Jātaka¹⁴⁶ and the statement in the *Vinaya* Commentary¹⁴⁷ that 4 *Kahāpaṇas* = 1 *Kaṁsa* (bronze or copper coin) would, however, fix its substance.¹⁴⁸ *Kārṣāpaṇa* is the standard exclusively of copper in Manu and Viṣṇu.* The *Jātaka* stories abound in references to copper *Kahāpaṇa* being the standard coin in circulation. It is shown by the frequent omission of the denomination after the amount whereas other coins are mentioned when intended.¹⁴⁹ The non-survival of these coins in much quantity

142 A. N. Bose, *op. cit.*, p. 357; U. Thakur, *INC*, 1962, Part I, p. 71.

143 Mrs. Rhys Davids, *JRAS*, 1901, p. 878.

144 *Jātaka*, Vol. IV, p. 12.

145 *Ibid.*, Vol. I, p. 7.

146 *Ibid.*, pp. 425-26.

147 IV. 266.

148 Mrs. Rhys Davids, *loc. cit.*

*[Cf. Amara (2.9.88), Nārada, Kauṭilya and others.—Ed.]

149 A. N. Bose, *op. cit.*, Vol. II, p. 131.

can be explained by the fact that it is a perishable metal compared to silver and is therefore apt to be melted to make domestic utensils. The mention of *Kārṣāpaṇa* in Manu, Viṣṇu, Yājñavalkya and the Śātavāhana inscriptions and its discovery in the excavations at Besnagar bring its career down to the fourth century A.D.¹⁵⁰

The word *Kārṣāpaṇa* is unknown in the Saṁhitā or Brāhmaṇa literature excepting once in the *Sāmavidhāna*.¹⁵¹ It is peculiarly a term of Classical Sanskrit coined in the Sūtra period.¹⁵²

Kārṣāpaṇa was the name of the silver punch-marked coins of which numerous hoards have been found in various parts of India. It was the standard medium of exchange from about the sixth century B. C. downwards. Scholars believe that the *Kārṣāpaṇa* was of three varieties—gold, silver and copper—and, according to Manu, the theoretical weight of a *Kārṣāpaṇa* was one *Karṣa*, i.e. 80 *Raktikās*.¹⁵³

Bhandarkar has identified gold *Kārṣāpaṇa* with *Suvarṇa* on the basis of its weight.¹⁵⁴ The *Arthasāstra* describes *Suvarṇa* as being one *Karṣa* in weight.¹⁵⁵ But no specimen of gold coins of this weight has been discovered so far and as such this identification is doubtful and is not supported by any other source.

Silver *Kārṣāpaṇas* have been generally identified with punch-marked coins by scholars. It is also mentioned in the Nasik cave inscription,¹⁵⁶ and Kauṭilya calls it *Prati*, i.e., *Kārṣāpaṇa*.¹⁵⁷

150 *Loc. cit.*

151 III. 7. 9.

152 V. S. Agrawala, *op. cit.*, p. 265. [The mention of *Kārṣāpaṇa* in Pāṇini's *Aṣṭādhyāyī* (5th century B. C.) has to be remembered.—Ed.]

153 VIII. 136 ; Yāj., I. 365.

154 *Anc. Ind. Num.*, p. 90.

155 *Artha.*, II. 19. 2.

156 *JNSI*, Vol. XII, p. 32. [sic.—Ed.] ; *Ep. Ind.*, Vol. VIII, p. 82.

157 *JNSI*, Vol. X, p. 32. [Sic. The idea is wrong.—Ed.]

Bhandarkar suggests that the silver *Kārṣāpaṇa* should be equated with the silver *Dharaṇa*.¹⁵⁸ According to Manu, the weight of one *Dharaṇa* or *Purāṇa* is 32 *Raktikās*.¹⁵⁹ Punch-marked coins weighing 32 *Rattis* (58.56 grains) have been discovered;¹⁶⁰ but no punch-marked coins weighing 80 *Rattis* have been found so far.¹⁶¹ But, the *Arthaśāstra* fixes the weight of the silver *Kārṣāpaṇa* at 1 *Karṣa*, i.e. 80 *Raktikās* or *Rattis* and this militates against the above identification. It is, therefore, suggested that, in the time of Kauṭilya, the weight of gold and silver *Kārṣāpaṇa* was one *Karṣa* whereas in the later period (in the time of Manu and Yājñavalkya) the same was reduced to only 32 *Raktikās*.¹⁶² The argument, however, does not have much force and we will have to wait till the excavators' spade brings to light further materials to prove the existence of gold *Kārṣāpaṇa* and of silver *Kārṣāpaṇa* of 80 *Rattis*.

Like the present rupee, the standard *Kārṣāpaṇa* had its sub-multiples. In Pāli literature occur *Kahāpaṇa*, half *Kahāpaṇa* and *Kākaṇī* or $\frac{1}{80}$ *Kahāpaṇa*.¹⁶³ Even *Sippikā* or cowrie-shells were used as petty coins.¹⁶⁴ In the *Arthaśāstra*, the standard coins and submultiples are distinguished as *Koṣa-praveś-āyam* (i.e., those received into the treasury) and *Vyavahārīṇa* (those current in the market). The *Arthaśāstra* mentions $\frac{1}{2}$ *Paṇa*, $\frac{1}{4}$ *Paṇa* (*Pāda*), $\frac{1}{8}$ *Paṇa* (*Aṣṭabhāga*), $\frac{1}{16}$ *Paṇa* (*Māṣaka*), $\frac{1}{32}$ *Paṇa* (*Ardhamāṣaka*), $\frac{1}{80}$ *Paṇa* (*Kākaṇī*), and $\frac{1}{160}$ *Paṇa* (*Ardhakākaṇī*).¹⁶⁵ It is interesting to note in this connection that coins excavated at Besnagar correspond

158 *Anc. Ind. Num.*, p. 169.

159 Manu, X. 135-36.

160 Bhandarkar, *op. cit.*, pp. 82-84, 114; V. S. Agrawala, *op. cit.*, p. 226.

161 Bhandarkar, *op. cit.*, p. 94.

162 *Ibid.*, p. 93. [The question of reduction relates only to the silver *Kārṣāpaṇa*. See, moreover, the *Amarakośa*, 2.9.88.—Ed.]

163 *Vinaya.*, Vol. II, p. 294; *Jāt.*, Vol. I, pp. 121, 340; Vol. III, p. 448.

164 *Jāt.*, Vol. I, p. 426.

165 *Artha.*, II.12.

approximately to 146 grains, the weight of a *Kārṣāpaṇa*, and to its fractions like $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$ which undoubtedly point to these being *Kārṣāpaṇa* and its sub-divisions.¹⁶⁶

Pāṇini refers to the sub-multiples— $\frac{1}{2}$ as *Ardha*¹⁶⁷ and *Bhāga*,¹⁶⁸ $\frac{1}{4}$ as *Pāda*,¹⁶⁹ and $\frac{1}{16}$ as *Māṣa*.¹⁷⁰ The silver *Kārṣāpaṇa* was the standard coin of his time, and whenever he refers to big sums¹⁷¹ without specifying the name of the coin, he means the silver *Kārṣāpaṇa*.¹⁷² As we have noted above, from the references in the *Jātakas*,¹⁷³ and in Pāṇini,¹⁷⁴ it is clear that the standard coin of the time was the silver *Kārṣāpaṇa*. The *Gaṅgamāla Jātaka* mentions big amounts like hundred thousand and fifty thousand pieces which obviously mean *Kārṣāpaṇas*. In the *Arthasāstra*¹⁷⁵ also, sub-multiples of silver *Kārṣāpaṇa* have been mentioned in the descending order (e.g. *śata-sahasra*, *pañcāśat-sahasra*, *daśa-sahasra*, *pañca-sahasra*, *sahasra*, *śata* and *viṃsati*) meaning so many silver *Paṇas*. In the same manner, Patañjali also speaks of *śata-sahasra* without, however, mentioning the word *Kārṣāpaṇa*.¹⁷⁶ In one place,¹⁷⁷ Patañjali mentions *Kārṣāpaṇa* when he says that the phrase *ekādaśaṁ śatam* and *ekādaśam sahasram* are understood to refer respectively to a hundred and a thousand *Kārṣāpaṇas* exceeded by eleven.

Thus, it will be seen that, while the *Jātakas* invariably refer to *Kahāpaṇa* as being the name of the current coin, the

166 *An. Rep. Arch. Surv. Ind.*, 1913-14, pp. 220 ff.; 1914-15, p. 87; A. N. Bose, *op. cit.*, Vol. II. p. 132.

167 *Aṣṭādhyāyī*, V. 1. 48.

168 *Ibid.*, V. 1. 49.

169 *Ibid.*, V. 1. 34.

170 *Loc. cit.*

171 *Ibid.*, V. 1. 27, 29, 34.

172 V. S. Agrawala, *op. cit.*, p. 265.

173 Cf. Bhandarkar, *AIN*, p. 79.

174 *Aṣṭā.*, V. 1. 21, 27, 29, etc.

175 *Artha.*, p. 368.

176 *Mahābhāṣya*, on II. 1. 69. 5; I, p. 404; V. 1. 21; II, p. 346, etc.

177 On Pāṇini, V. 2. 45; also cf. V. 1. 34; V. 4. 2, etc.

Aṣṭādhyāyī uses both names, *Kārṣāpaṇa* and *Paṇa*, whereas the *Arthaśāstra* uses only the shorter form *Paṇa*. On the other hand, *Kātyāyana*¹⁷⁸ records one more name for *Kārṣāpāṇa*, viz., *Prati*. This seems to be a later name for *Kārṣāpāṇa*, also mentioned in the *Sabhā-parvan*¹⁷⁹ of the *Mahābhārata* as well as in the Nasik cave inscription of Usavadāta.¹⁸⁰ This further shows that the *Kārṣāpāṇa* was mentioned by different names, together with its sub-multiples, and that they came to be recognised as standard coins throughout the ages.¹⁸¹

The value of the *Kārṣāpāṇa* of course changed with the varying value of copper which is evident from the observation of Buddhaghoṣa that, at the time of king Bimbisāra at Rājagaha (Rājagṛha), 5 *Māṣakas* were equal to one *Pāda* and 4 *Pādas* were equal to one *Kārṣāpāṇa* and this is corroborated by the Jātaka evidence that a 4-*Māṣaka* piece is of lower value than a *Pāda*.¹⁸² Buddhaghoṣa further warns that the *Kahāpaṇa* of 20 *Māṣakas* is the ancient *Nilakahāpaṇa*,¹⁸³ not the *Rudradāmaka* or *Kahāpaṇa* of 16 *Māṣakas*. "Obviously in the scholiast's knowledge, the depreciated standard was adopted and followed from the time of the Kṣatrapa king."¹⁸⁴

From the above, it can further be seen that the most popular coin of this type was *Viṃśatika* of 20 *Māṣakas* as mentioned by Pāṇini,¹⁸⁵ which is also confirmed by Buddhaghoṣa in his *Samantapāsādikā*¹⁸⁶ commentary on the *Vinaya Piṭaka*. It is interesting to note that Durga Prasad has found

178 V. 1. 25; II, p. 347. [But see Monier-William's *Dict.*, s.v. *pratika*.—Ed.]

179 5. 68.

180 VIII. 82; *JNSI*, Vol. VII. 32.

181 For details, see V. S. Agrawala, *op. cit.*, pp. 266-72.

182 *Jāt.*, Vol. III, p. 448.

183 We have reference to *Kālahāpaṇa* in *Jātaka*, No. 536.

184 A. N. Bose, *op. cit.*, Vol. II, p. 133. For a different view, see D. C. Sircar, *Studies in Indian Coins*, pp. 73 ff.

185 *Aṣṭā.*, V. 1.32; V. 1.27.

186 *Samantapāsādikā*, Vol. III, p. 45; *AIN*, pp. 111-12, 186; *JNSI*, Vol. XIII, p. 187; Vol. XV, pp. 35-36; *Jāt.*, Vol. III, p. 448; *Yāj.*, I. 364.

specimens of the *Viṃśatika* coins weighing 78 to 80 grains, from Rajgir, now in the Lucknow Museum. Some such coins have also been found in the Pañcāla region.¹⁸⁷ From their fabric and symbols, it can be said with certainty that they represent an earlier stage than the 32-*Ratti Kārṣāpaṇas* and 'the period of transition from 20-*Māṣa* weight to 16 *Māṣas* seems to be the epoch of the Nanda kings who are credited with the standardisation of weights'.¹⁸⁸ The Nandas, it seems, were the first to initiate a bold reform in the punch-marked currency in the matter of weight, symbols and fabric which are evident even 'by a superficial comparison of the *Viṃśatika* coins with the standard *Kārṣāpaṇas* of 16 *Māṣas* and 5 symbol groups'.¹⁸⁹

Besides *Viṃśatika*, Pāṇini also mentions *Triviṃśatika*,¹⁹⁰ a name which we come across only in the *Aṣṭādhyāyī* and nowhere else. It stands for a coin of 30 *Māṣas* or 60 *Rattis*. Some punch-marked coins weighing 104 and 105-07 grains (about 58 *Rattis*) were obtained by Durga Prasad, which may be the *Triviṃśatika*.¹⁹¹

The *Viṃśatika* and *Triviṃśatika* also appear in copper weighing 100 and 150 *Rattis* respectively. The heavier issues in copper were in use much longer than in silver. Further, the *Viṃśatika* had its own sub-multiples of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$ all related to the weight standard of 40 *Rattis* in silver and 100 *Rattis* in copper. V. S. Agrawala has convincingly shown that the coin-denominations of heavier weight following the *Viṃśatika* weight system also existed, such as *Dviviṃśatika*, *Triviṃśatika*, *Adhyardhaviṃśatika* (with varying weights of 120, 80 and 60 *Raktikās*), *Ardhaviṃśatika* and *Pādaviṃśatika* (of 20 *Raktikās* and 5 *Māṣas* respectively).¹⁹² Following Kauṭilya¹⁹³ and

187 Cunningham, *Coins of Ancient India*, p. 81; *JNSI*, Vol. XV, pp. 36-37.

188 V. S. Agrawala, *op. cit.*, pp. 271-72.

189 *Ibid.*, p. 272.

190 V. 1.24.

191 *JUPHS*, July, 1939, p. 33.

192 *Loc. cit.*

193 *Artha.*, II. 12.27; Shamasastri, p. 67

Manu,¹⁹⁴ he further suggests that the copper *Kārṣāpaṇa* followed the weight system of the silver *Kārṣāpaṇa*.¹⁹⁵

Coming to the ratio among gold, silver and copper, we find that it was never steady. In a Nasik cave inscription, *Suvarṇa* is given as equal to 35 *Kārṣāpaṇas*. According to the *Arthaśāstra*, the silver *Dharaṇa* and the gold *Suvarṇa* are almost of the same weight, and, on this basis, the ratio between gold and silver would be 35 : 1. But, the dearth of silver was responsible for depreciation in the standard and the extant silver coins generally conform to Manu's weight for a *Purāṇa*, which is about 58 grains. Thus, on the basis of Manu and the Nasik inscription, the rate of exchange between gold and silver has been worked out as $58 \times 35 : 146$ or $14 : 1$ approximately.¹⁹⁶ Cunningham, on the basis of the *Periplus* has shown that the ratio between gold and silver was 8 : 1 as gold was much cheaper in India than in Persia.¹⁹⁷ According to the *Śukranīti*, however, the ratio is 16 : 1.¹⁹⁸

The ratio between gold and copper is still more difficult to determine. Bṛhaspati¹⁹⁹ and Kātyāyana suggest that the weight of *Suvarṇa* or *Dināra* is 124 grains and that of a *Karṣa* 146.4 grains, and 48 *Kārṣāpaṇas* make 1 *Suvarṇa* or *Dināra*. Thus, the exchange rate between gold and copper comes to $146 \times 48 : 124$ or $57 : 1$ approximately.²⁰⁰ Copper is thus more than 20 times its present value. The *Śukranīti* while mentioning the ratio between gold and silver and between silver and copper, fixes it at 16 : 1, and 80 : 1 respectively, making gold and copper stand at 1280 : 1. "The remarkable variation in exchange rates is

194 VIII. 136 ; VII. 136 ; Yāj., 1.265.

195 *JNSI*, Vol. XV, p. 34. For the table of the *Kārṣāpaṇa* series, see *ibid.*, Vol. XV, p. 40 ; also cf. *AIN*, pp. 112-113. [Manu's silver and copper *Kārṣāpaṇas* have different weights.—Ed.]

196 A. N. Bose, *op. cit.*, Vol. II, p. 133

197 *Coins of Ancient India*, p. 5.

198 IV. ii. 181 ff. ; also cf. D. C. Sircar, *op. cit.*, pp. 77 ff.

199 X. 14 f.

200 A. N. Bose, *op. cit.*, Vol II, p. 134.

explained by the variation in regional distribution of metals whether obtained from native soil or through foreign exchange and by the still infant attempts of business communications to break through regional barriers."²⁰¹

Besides gold, silver and copper, coins were also made of other metals such as lead. The *Nidānakathā* actually refers to lead *Kahāpaṇa*. Moreover, coins of this metal have been discovered from about the beginning of the Christian era, and they belong to Strato, Azes and Rañjuvula and to the Andhrabhṛtya dynasty. Nickel came to be used by the Indo-Greek kings as well as the Kṣudrakas and the Mālavas in the time of Alexander.* Vilivāyakura and his successors in the district round Kolhapur, the Āndhrabhṛtya kings in the Chanda District of Maharashtra and the Kṣatrapa dynasty founded by Caṣṭana also used potin for their coinage. According to Buddhaghosa, even *Māṣakas* of wood, bamboo, palm-leaf or lac passed current if they bore the requisite stamp of the *rūpa*.²⁰²

Thus, from all available accounts, it is clear that the earliest *Kārṣāpaṇa* coins found in India bear no evidence of foreign influence and that the existence of an independent Indian coinage in the fifth and fourth centuries B.C. is attested by the fact that the square form of Indians coins cannot be traced to the round-shaped western coinage. In fact, the square coin was so firmly established in c. 200 B.C. that it was even imitated by the earliest Greek kings in India, viz., Demetrius, Pantaleon and Agathocles. Moreover, the square coin also finds represented in the sculptures of Bodhagaya and Bharhut.

201 *Loc. cit.* [The *Śukranīti* is a late work.—Ed.]

* [See above, p. 21, note 3.—Ed.]

202 Bose, *op. cit.*, pp. 134-135.

III

EARLY INDIGENOUS COINS OF NORTHERN INDIA

A. N. Lahiri, Calcutta University.

Indians who knew the use of metal even in pre-historic times ultimately found it, like other civilised peoples, to be the most suitable medium of exchange at a very early date, for metal by nature has all the qualities : it has an intrinsic value and is not only homogenous, durable and divisible, but is also portable and easily worked upon.

It is likely that gold dust of specific weights was initially used for commercial transactions, and gold (?), silver and possibly copper lumps, again of specific weights, were also used for that purpose. But evidently to obviate the trouble of frequent weighing of metal lumps used in commercial transactions, they were stamped with recognised marks of various commercial or political authorities issuing them. Naturally, specific marks which were the recognised symbols of authority ensured the weight and value of the respective metallic pieces and easily served as proper guarantee of their genuineness. And thus these various metallic pieces ultimately became coins in the modern sense of the term, even though many of them were primitive in nature and often remained in the experimental stage.

However, the respective marks of various primitive coin-issuing authorities consisted generally of once-meaningful symbols and rarely of a broad device. In fact, these numerous and often mysterious symbols played a highly important role so far as the early indigenous issues are concerned. Not only the 'Archaic Coins', i. e. the earliest uninscribed pieces, but also most of the inscribed issues of the pre-Gupta epochs bear these symbols. Even some coins of two early Indo-Greek rulers, viz. Agathocles and Apollodotus I Soter, bear some of them. Quite a few of these enigmatic symbols

appear to be prehistoric in origin ; for, symbols similar to those seen on early indigenous coins are met with on the Indus Valley seals.

In spite of some disputed references to gold coins, no pre-Gupta indigenous gold piece has so far come to light, and this fact indicates that gold coins being too precious for commercial or other transactions were never, or very seldom, issued in any quantity. In fact, though often mentioned in early Indian texts, the *Suvarṇa* of 80 *ratis* (about 144 grains) remained a theoretical gold coin until Skandagupta struck gold pieces of that indigenous standard.

This is, however, not the case with coins in silver and copper. Thousands of silver and copper pieces of undisputable numismatic character and datable to periods much anterior to the advent of the Greeks in India have been discovered from various archaeological excavations, stray diggings and surface explorations. The earliest datable references to any silver weight standard appears to be what Kauṭilya furnishes us in his *Arthaśāstra*. The calculated weight of his silver *Dharaṇa* is about 80 *ratis* or 144 grains (9.33 grams). But, strangely enough, silver coins of this 80-*rati* standard were never issued by any indigenous authority either of the time of Kauṭilya (c. 4th century B. C.) or of any later date ; and it was only about a century and a half after Kauṭilya's time that the Indo-Greeks introduced silver coins of the 80-*rati* standard. On the contrary, we have thousands of punch-marked silver coins, attributable to the Maurya period or even to earlier epochs ; and, strangely enough, they conform not to the heavy 80-*rati* *Dharaṇa* of Kauṭilya, but to the lighter 32-*rati* *Dharaṇa* or *Purāṇa* of Manu and other law-givers. Evidently, this 32-*rati* *Dharaṇa* or *Purāṇa* was otherwise referred to as *Kahāpaṇa* and *Kārṣāpaṇa* respectively in early Buddhist and Brāhmaṇical texts.

Then, so far as the copper coins are concerned, the *Paṇa* of Kauṭilya is but the *Kārṣāpaṇa* of Manu, for both the coins weighed 80 *ratis* or about 144 grains (9.33 grams). But we

do not unfortunately come across many ancient copper coins weighing 80 *ratis*. In fact, very few ancient copper coins of any recognised standard have come to light, and, as it appears, nowhere in ancient India issuers of copper coins were careful enough to maintain strictly any specific weight-standard.

However, the term *Kārṣāpaṇa* denoted both silver and copper coins, and some scholars have even found references to gold *Kārṣāpaṇas*.

But while coins only in silver and copper were extensively used in Northern India, people in Southern India were accustomed to use coins in minor metals like lead, potin and copper. Of course, ancient gold and silver coins are not unknown in Southern India; but their issue was restricted.* Some Śātavāhana kings were the first to issue a handful of silver coins, while gold coins were probably introduced by the Western Cālukyas.** The metallic currency in Southern India developed in a different line, and the weight-standards of coins there were not generally the same as those in the north.

The early indigenous coins of Northern India fall into two broad categories: (I) Archaic coins or the most primitive uninscribed issues, and (II) Inscribed issues.

I. Primitive Uninscribed Issues.

Archaic coins were manufactured by the punch-marking, casting and die-striking processes, all indigenous to India. They comprise six classes of coins: 1. the so-called Bent-bar or Wheel-marked coins in silver and copper; 2. the Saucer-like or Cup-shaped coins in silver; 3. the 'common' Punch-

*[Many hoards of silver punch-marked coins have been discovered in the southern part of India. Moulds for the manufacture of punch-marked coins have also been found. Nārada (as quoted in the *Vācaspatya*) says, *Kārṣāpaṇo dakṣiṇasyām diśi raupyaḥ pravartate*, i.e. the silver *Kārṣāpaṇa* was widely used in South India. Cf. also the evidence of Buddhaghōṣa who was a South Indian.—Ed.]

** [The *Silappadikāram*, assigned to a pre-Cālukya date, speaks of gold coins (Kanakasabhai, *The Tamils Eighteen Hundred Years Ago*, 1956, p. 142).—Ed.]

marked coins in silver and copper ; 4. the Uninscribed Cast coins in copper ; 5. the Uninscribed Die-struck coins in silver and copper ; and 6. miscellaneous experimental pieces in silver and copper.

Of the six classes of Archaic coins in silver and copper, the first, second and third classes, i.e. the Wheel-marked, Saucer-like and 'common' Punch-marked pieces, may technically fall into the broad category of Punch-marked currency, since their devices consisting of symbols are effected by the punching process. Coins of the fourth and fifth classes are technically distinct, as they are manufactured by different processes, viz. the casting and die-striking ones. Coins of the sixth class comprising miscellaneous sorts cannot be properly categorised.

1. *Wheel-marked or Bent-bar Coins.*

The rare but well-known Bent-bar coins were so called because the specimens discovered earlier look like 'bars' and are actually somewhat 'bent'. But coins of the same series, but of lower denominations discovered subsequently, are not so bent. In fact, only full coins of the denomination of 100 *raits* (about 180 grains or 11.66 grams) are always bent ; but the common 'quarter' and 'one-eighth' pieces of 25 and 12½ *ratis* respectively (weighing 45 and 22½ grains, or 2.9 and 1.46 grams) are never bent. Full coins being somewhat elongated in shape get bent while receiving at a heated stage two broad punches at two ends. But coins of lower denominations which are invariably shorter and receive only one punch impression on them never get bent in the manufacturing process. This is why this series of coins, full specimens of which are bent and lower denominations of which are not bent, but all of which bear the impression of 'wheel-like' symbols, are now called by the generic term 'Wheel-marked'. The wheel-like symbol of these coins is, however, known in more than half a dozen varieties.

Wheel-marked coins, known-mainly in silver and very rarely in copper, come from the Taxila region and places to its west.

The Taxila excavations have yielded a number of full-sized wheel-marked coins including three specimens in copper. Various stages of evolution are marked by the fabric of full-sized coins. Earlier specimens were comparatively short and broad ; but gradually they tended to be narrower and longer in size. Wheel-marked coins appear to have originated in the fifth century B. C. and continued to be minted till a short while before of the invasion of Alexander.

2. *Saucer-like or Cup-shaped Coins*

Saucer-like or Cup-shaped coins are so called because they look like saucers or shallow cups. They are of two distinct groups : one consisting of specimens of 24-*rati* coins and the other of 48, 8 and 4 *ratīs*. The 24-*rati* coins of Group I always bear 4 broad symbols. Of Group II, full-sized 48-*rati* coins alone have four broad symbols of ornamental designs ; but those of lower denominations bear either two or one symbol of similar design. Saucer-like coins of both the groups are roundish in shape and thin in fabric. Silver globules of specific weights were flattened thin, and certain specific symbols were punched on them while hot ; consequently, they became concave on the side that received the punches.

Saucer-like coins of Class I, which are invariably known in the denomination of 24 *ratīs* (i.e. 43.2 grains or 2.80 grams) and which bear, only on the obverse, four broad symbols including the significant 'serpentine' or *tri-pāda* symbol, are reported from places around Lucknow and Mathura. These coins evidently preceded the 4-symbol 24-*rati* mass-produced rectangular silver coins of the famous Paila hoard. The 24-*rati* standard and the invariable *tri-pāda* symbol link the saucer-like coins of Class I with the Paila hoard specimens. The 24-*rati* saucer pieces are evidently of the pre-Maurya, and possibly of the pre-Nanda epoch, and perhaps represent India's earliest organised currency. They might have been the issues of the Kosala-mahājanapada.*

* [The Kosala-mahājanapada ceased to exist in a political sense long before the Nandas and the Mauryas.—Ed.]

Saucer coins of Class II come from places around Varanasi. Full specimens, which are of 48 *ratis* (i. e. 86.6 grains or 5.60 grams) and generally of an elliptical shape, bear four symbols, of which the two ornamental ones that are constant and of the same dimension are bigger than the other two which are of various changing designs. The bigger and smaller symbols occur alternately on the obverse of the coin-flan, while the reverse remains blank. The bigger symbols, even though they look alike, are of minutely different designs and stamped by two distinct punches. But the two changing and smaller symbols are conspicuously of the same design and effected by one and the same punch. The 8-*rati* pieces (weighing 14.4 grains or 0.93 grams) of a thin elongated fabric always bear the two constant bigger symbols, while the four-*rati* tiny coins (weighing 7.2 grains or 0.47 grams) of a thin round fabric bear only one of the two symbols, that has a small circle at the centre. Saucer-like coins of Class II evidently preceded the common mass-produced punch-marked coins (most of which were manufactured in the Maurya period) and were probably issued by the authorities of the Kāśi-mahājanapada around the fifth century B. C.*

3. *Common Punch-marked Coins*

The 'common' Punch-marked coinage, even though its specimens bear separately punched symbols, are clearly different in nature from the Wheel-marked or Saucer-like coins. Wheel-marked coins bear either two symbols or one according as they are full-sized long ones or short ones of smaller denomination. Saucer-like coins of Class I, as also the full-sized pieces of Class II, bear four broad symbols, while the 8-*rati* and 4-*rati* specimens respectively of Class II display two or one such symbol. Common punch-marked coins, on the contrary, would always bear five minute symbols. They are far too extensive

* [We find it difficult to support these ideas. Kāśi was annexed to Kosala in the 6th century B. C.—Ed.]

and widespread and highly well-organised. They are evidently developed from the Saucer-like coins of Class I through the 24-*rati* 4-symbol specimens of the well-known Paila hoard.

While the comparatively common squarish punch-marked pieces were mass-produced, the roundish ones were individually processed. As for the production of squarish specimens, long strips were initially cut out of a big sheet of metal, and then squarish bits of required sizes were chopped off from the strips, and finally the bits were often clipped at corners to make them conform to the necessary weights. The flans of roundish specimens were, on the contrary, prepared individually by flattening thin metal globules of a specific weight. Both squarish and roundish coin-blanks thus produced would receive from individual punches a group of predetermined symbols. While specimens of the Paila hoard have four broad symbols and weigh 24 *ratis* (like the specimens of the Saucer-like coins of Class I), 'common' Punch-marked coins invariably bear a group of five minute symbols and weigh 32 *ratis*. Common Punch-marked coins are referred to as *Kārṣāpaṇa* in Brāhmaṇical texts and as *Kahāpaṇa* in Buddhist and Jain literature.

As Cunningham noted, broader and thinner the punch marked coins, the earlier they are in date. In fact, specimens of comparatively broad, medium and small fabrics represent three stages of development. Broadest (and consequently thinnest) specimens with symbols of comparatively broad size and simple design are of the earliest period; they may be assigned to the pre-Maurya, or even the pre-Nanda, epoch. Medium specimens with somewhat complex symbols which come from wider areas, specially of Northern India, originated in the next—perhaps the Nanda period. Punch-marked coins of the thick small fabric, displaying symbols of comparatively minute and complex designs and coming from almost all parts of India and Pakistan and certain contiguous areas of Nepal and Afghanistan, were evidently

manufactured in the Maurya and early Śuṅga periods, and might even have been sporadically minted for one or two centuries more.

Punch-marked coins are also known in copper ; but evidently their manufacture was restricted to certain isolated localities. They never attained the status of a universal currency. As it appears, the need for a universal copper currency was met by cast copper pieces, some types of which had a very wide circulation. Two most remarkable types of copper punch-marked coins come from the Nagari and Bhagalpur areas. The Nagari coins are small round pieces of an indeterminate standard displaying symbols on both sides. The coins fall into at least half a dozen groups weighing from three to hundred grains. The number of symbols vary from four to one on the obverse and three to one on the reverse—according to the availability of space on the coin-flans. The symbols consists of those often seen on common silver punch-marked coins, e.g., the Sun, Six-armed symbol, Human figure, Tree-in-railing, Bull, Peacock on hill as well as the conspicuous Ujjain symbol. These were probably the 'Local' issues of the famous Madhyamikā-janapada which at a later time became the headquarters of the migrating Śibis.

The punch-marked copper coins of the Bhagalpur area are large thick squarish pieces, again, of an indeterminate standard weighing from 217 to 359 grains. These curious issues display five broad symbols on the obverse and four similar signs on the reverse. Out of the nine symbols only three, viz. the Sun, the Six-armed symbol and a form of the Three-peaked Hill with crescent, are seen on the common punch-marked silver coins. These archaic-looking copper specimens appear to be the 'local' issues of ancient Aṅga.*

4. *Uninscribed Cast Coins.* Cast coins of both the archaic uninscribed and the later inscribed classes are invariably in copper. They were manufactured by pouring molten metal into

* [Aṅga was annexed to Magadha in the 6th century B. C.—Ed.]

a cavity leading to the designed hollow space inside a pair of moulds somehow joined together. Uninscribed cast copper coins are of two broad categories : (a) Universal and (b) Local.

Uninscribed cast coins of the Universal category, e.g. the round coins with the devices of 'Elephant' and 'Three-peaked Hill with crescent' come from all over Northern and some parts of Central India. Both round and square coins of the Universal types generally display traditional symbols of simple design, such as the 'Elephant', 'Tree-in-railing', 'Three-peaked Hill' and 'Triangle-headed Standard' as well as the conspicuous 'Hollow-cross' and the 'Ladder-like symbol'—either single or in certain combinations. Curiously enough, they do not display symbols which are so characteristic of the Wheel-marked, Saucer-like and 'Common' silver punch-marked coins.

Uninscribed cast coins of 'Local' types are generally round in shape and simple in design ; but those coming from places like Kauśāmbī and Kumrahar often display symbols of complex designs. They, however, bear some traditional symbols also seen on Universal-type cast pieces.

The technique of casting coins was peculiar to ancient India. According to Nearchus, a companion of Alexander the Great, Indians used only cast bronze but not hammered. Incidentally, uninscribed cast copper coins are amongst the most common numismatic issues of ancient India. They appear to have been the Universal copper currency in both the pre-Maurya and Maurya periods, and might have originated in the early fourth or even the fifth century B. C.

5. *Uninscribed Die-struck Coins.* Uninscribed die-struck coins are known generally in copper and rarely in silver. Unlike the punch-marked pieces, die-struck coins get the impression of the entire device on either side from one single die. Those that bear the device on one side only are apparently of an earlier date, while those that display devices on both the obverse and reverse are later in date. The former pieces are known as single-die coins and the latter double-die ones.

In manufacturing single-die coins, a suitable blank was first heated and then placed on some solid material and struck on the upper side with a die-punch, i.e. a cylindrical bar having some device cut in intaglio. But for the manufacture of double-die coins, not only the die-punch but also an anvil-die, i.e. 'an intaglio cut in an anvil', would be necessary. In this case, a suitably heated coin-blank was first placed on the 'anvil-die' and then the 'die-punch' was put on the blank and struck heavily with a hammer, so that the blank 'squeezed between the hammer and anvil received punch-impression on its upper side while its under side took a design in relief'.

Both the single-die and the double die varieties of un-inscribed die-struck copper coins are rather common, specially in the Taxila region. This is not the case with the un-inscribed die-struck coins in silver, which are extremely rare. They bear unusual symbols or devices, often in crude designs, and come only from a very few restricted localities, which facts indicate that these stray silver pieces were but experimental issues, sporadically manufactured by inexperienced people.

Early die-struck coins, specially those in copper, generally bear traditional Indian symbols like 'Tree-in railing', and 'Three-peaked Hill'. Broad devices, such as 'Elephant' and 'Lion', were probably introduced at a somewhat later date.

The very primitive look of the un-inscribed die-struck coins and the depiction on them of symbols which generally occur on punch-marked and cast pieces speak eloquently of their high antiquity. The earliest of these archaic coins might well go to the fourth century B. C., if not still earlier.

6. *Miscellaneous Uninscribed Stray Issues.* Besides the above categories of regular and rather well-organised archaic coins, we come across a few others which are but sporadic experimental issues, never attaining the status of a recognised currency. These stray pieces, manufactured mainly in silver, are either of the punch-marked or of the die-struck category. Though, generally speaking, the former punch-marked issues

are of an earlier date, it is quite possible that both the punch-marked and die-struck pieces were somewhat simultaneously manufactured in isolated localities, even when various organised series of coins were put into circulation. It is therefore difficult to determine the respective dates of these stray experimental pieces. Their dates may range between the fourth, or even the fifth, century B.C. and the second century B.C.

However, we may here notice a few series of experimental coins.

(i) There are a few specimens of a curious series of punch-marked coins, which may be called 'Droplet coins' since their flans were prepared by dropping down a quantity of molten metal and then beating it flat when still hot. These irregularly shaped pieces are of various weights and bear symbols often seen on common punch-marked coins. They represent perhaps the earliest stage of the punch-marking process, when the method of preparing blanks was not standardised.

(ii-iii) There are also two series of one-symbol archaic-looking saucer-like coins. One series coming from the Lucknow area is represented by tiny pieces with a triangular symbol, which are perhaps specimens of a short-lived 8-*rati* currency. The other series coming from the Sultanpur area consists of coins bearing a peculiar broad symbol and having three denominations, viz. double, single and half *Kārṣāpaṇas*.

(iv) There is a uniform series of squarish silver coins with an average weight of about 26 grains. They are single-die pieces depicting on the obverse a tiger-like animal with a fish-like object above and some other symbols around. They are apparently half-*Kārṣāpaṇas* of 16 *ratīs*, representing a very early stage of the die-striking process.

II. Inscribed Coins

Early inscribed indigenous coins were manufactured by the casting and die-striking processes, and betray stages of evolution. They may be divided into three sub-categories : (A)

Coins of various Localities and Tribes, (B) Coins of the Gupta Kings, and (c) Various Post-Gupta Issues.

A. *Local and Tribal Coins.* (a) *Local Coins.*—These coins of ancient India fall into two classes : (i) City issues, and (ii) Regional or Country issues.

(i) The City issues are all in copper and are either cast or diestruck. They are known to bear the bare names of Erakina, Kauśāmbī, Māhiṣmatī, Tripurī, Ujjayinī, Vārāṇasī and Vidiśā. Extreme rarity of these City coins suggest that they were in circulation for a short period and in a small number, apparently prior to the more extensive Regional issues. Somewhat archaic letter-forms of their short, and consequently early, legends consisting of the Prakrit form of their names, like *Ujenīye*, *Kosabi*, etc., also point to high antiquity. Since these coins come from certain regions of modern Uttar Pradesh and Madhya Pradesh, which were beyond the north-western Kharoṣṭhī zones, they bear legends written only in Brāhmī characters.

(ii) Besides the City issues there are other extensive series of local coins, which may be called, for the sake of convenience, 'Regional' or 'Country' issues. Unlike the City issues these coins do not bear any place-names. Yet they are attributable to particular regions or localities on account of certain characteristic features and definitely known find-spots. Thus we have distinctive series of coins for the regions of Almora, Ayodhyā, Kanauj, Kauśāmbī, Mathurā, Pañcāla and Takṣaśilā. Except the Almora issues which are of an admixture of silver and copper, these regional coins are always in copper, and generally die-struck. Some early pieces, specially of Ayodhyā and Kauśāmbī, are, however, cast. They may be of squarish or round shape. This category of Local coins generally bear the names of rulers of various dynasties, who are mostly unknown from any other source.

These regional coins almost always bear groups of early Indian symbols like the Tree-in-railing, the so-called Ujjain symbol, Taurine and Mountain symbols, Elephant, Bull, etc., or

rarely a broad device. A particular dynastic series of these coins have particular groups of symbols. By a comparative study of these issues scholars have been able to arrange them in dynastic and chronological orders. Of all the regional coinages, those of Almora, Mathurā and Pañcāla are noteworthy.

The Almora coins are distinguished by their type, fabric, metal and size. The obverse of these large, round and debased silver issues bears a circle joined with a curved line, a Stag before a symbol and the king's name in the margin in bold letters, while their reverse has what looks like an 'altar surmounted by a triangle-headed standard with an elaborate *nandipada* on its face'. Four kings, apparently of one single family, viz. Haridatta, Śivadatta, Śivapālita and Mṛgabhūti, are known from the Almora coins.

The coins attributable to Pañcāla 'forms one of the longest and the most uniform series of ancient Indian coins'. They are characterised by the presence, on the obverse, of three almost constant symbols (known as the three Pañcāla symbols) with the king's name below. The reverse generally depicts the figure of a deity (or sometimes its attributes), whose name forms, as a rule, a component of the issuer's name. As many as twenty-four names of rulers are seen on the coins of this locality. They are all in copper, and are characterised by an incuse square on the obverse.

(b) *Tribal Coins.* Tribal coins, on the contrary, reveal the names of a number of ancient coin-issuing tribes of the Punjab and Rajasthan areas. The early tribal issues of the Punjab region display legends simultaneously in Brāhmī and Kharoṣṭhī characters, while the remaining ones of both the Punjab and Rajasthan have legends written only in Brāhmī letters.

Tribal coins almost invariably bear the names of the tribes concerned and sometimes those of their localities or issuing chiefs along with their regal title or epithet. Thus the coins of the Kuṇindas have the legend, *Rājñah Kuṇindasya Amoghabhūtisya mahārājasya*, meaning [Coin] of *Mahārāja* Amoghabhūti, king of the Kuṇindas.'

Mathurā had a distinguished local type of round copper coins. While the main obverse motif was 'Lakṣmī standing, holding lotus' amidst various symbols, the reverse device consisted of 'Three crudely represented Elephants with Riders'. The type was introduced by one Gomitra sometime about the second century B. C. and continued by a long line of his Hindu successors. The Śāka satraps, who came after the local Hindu princes, did not change the firmly established obverse motif of 'Standing Lakṣmī'. The first two of them, viz. Rañjuvula and Śoḍāsa, replaced the 'Three Elephants' device of the reverse by that of 'Abhiṣeka of Lakṣmī', which was finally replaced by the figure of a 'Horse' on the coins of Hagāna, Hagāmaṣa, Śivadatta and Śivaghoṣa, the four other Śāka Satraps of Mathurā.

Most of the tribal coins are in copper. Only some early Punjab tribes who came in contact with the Indo-Greeks, viz. the Audumbaras, Kulūtas, Kuṇindas, Vaimakis, Vṛṣṇis and Yaudheyas, issued some silver coins in imitation of the 20-*rati* Indian drachms of the Greek kings of India. Tribal coins generally bear groups of early Indian symbols, though a few of them are known to use some broad devices.

Tribal coins sometimes indicate the form of government adopted by the concerned tribes. We know from their coins that the Mālavas and the Yaudheyas followed, at least for certain periods of their political existence, the ancient Indian *gaṇa* form of government.

But the greatest importance of the tribal coins lies in the fact that their find-spots help us in locating the tribes to certain well-defined regions. This way we know from the provenance of coins that tribes like the Mālavas and Śibis took recourse to migration from their respective original homelands in the Punjab and settled in the Jaipur and Chitorgarh Districts respectively. The Śibi coins again specifically refer to Madhyamikā as their political seat, for their coin-legend reads, *Majhamikāya Śibi-janapadāsa*, i.e. [Coin] of the *janapada* of the Śibis in Madhyamikā.

Of the Punjab tribes, we have the coins of the Agratyas, Audumbaras, Kulūtas, Kuṇindas, Rājanyas, Trigartas, Vaimakis, Vṛṣṇis and Yaudheyas. The Audumbaras, Kulūtas, Kuṇindas, Vaimakis and Vṛṣṇis were, as their coin legends show, ruled by their respective chieftains. The coins of the Yaudheyas, who had the *gaṇa* form of democratic government, do not, as expected, bear the name of their chiefs. Then the unimportant Punjab tribes, viz. the Agratyas, Rājanyas and Trigartas, issued coins in the names of their respective *janapadas*, while the Vaimakis, as a few of their coins show, had also for sometime their *janapada* ruled by their chiefs adopting a royal title like those of the Audumbaras and others.

Of the tribes of Rajasthan, the Ārjunāyanas, Mālavas, Śibis, Sudavapas and Uddehikas have left their coins for us. The Uddehikas and Sudavapas were ruled by their respective chieftains. The Ārjunāyanas, and perhaps the Mālavas too, had the *gaṇa* form of government, while the Śibis issued coins in the name of their *janapada*, naming, as already noted, Majhamikā or Madhyamikā as their seat of power.

There are again some miscellaneous copper coins of early dates, which bear enigmatic legends like *Upagodasa*, *Upatikya*, *Kāḍasa*, etc. It is not easy to attribute them either to the Local or to the Tribal series of coins with any amount of certainty.

B. Coins of the Imperial Guptas and Others. The so-called Golden age of the Gupta period of Indian history provides us with a remarkable coinage which consists of abundant gold issues and comparatively rare silver and copper pieces. Many of them attain an artistic standard which no other Indian coin could reach. By the masterly execution of their devices, by the originality and variety of their types, by the fine style of their calligraphy, and the highly poetic legends, gold coins of the Guptas have carved out for themselves a unique place in the history of the world's numismatic art. Gupta silver issues, though initially copied from those of the vanquished Western

Satrapas, are not also to be lightly dismissed. They too have their own artistic merits.

The numismatic art of the Gupta age, remarkably creative as it was, is full of originality and vitality. Of course, it is true that they were initially exposed to Kuṣāṇa influence. But that to a great extent was due to the inherent conservatism of the Indian moneyers, who were reluctant to bring about any unnecessary change in coin-types. Very soon, however, the artist of the Gupta mint overcame the influence of the Kuṣāṇa coins and asserted himself in the application of indigenous patterns of beautiful forms. Gradually the devices of the Gupta coins discarded all foreign influence and embellished themselves with indigenous features. True, the refined realism that permeated the depiction of the royal portraits on Greek coins is not to be witnessed on Gupta pieces; but they do reveal instead a pleasing vitality and idealism that is characteristic of the artistic impulse of India's Classical Age. The artist of the Gupta mint often overwhelms us with originality of his numerous types and their remarkable varieties. He creates on coin-flans a galaxy of tiny bas-reliefs which depicts in gorgeous details various achievements of his royal master. The king in the prime of his strength and vigour is depicted either as a horseman rushing towards his prey, or in the act of killing a tiger or a lion, or even a rhinoceros from the back of his horse. He is as well shown as seated and playing on a *vīṇā*, or as standing in various attitudes. The reverse device is almost universally the figure of a goddess. She is evidently an Indian counterpart of Ardokhso of the Kuṣāṇa coins, who first sits on a high-backed Kuṣāṇa-type throne and holds a cornucopiae, and is later on depicted in diverse ways. In fact, Ardokhso is soon transformed into Durgā-Ambikā with the attribution of a *siṃha* as her *vāhana*, or into Śrī-Lakṣmī by being provided with a lotus-seat and given a lotus-stalk in place of the cornucopiae. The vast majority of the Gupta types are thoroughly Indian in character and represent the highest achievements of the indigenous numismatic art. In fact, as

Altekar aptly states, "Gupta gold coins display superb craftsmanship and are masterpieces of design and artistic technique."

Gupta coins testify to the literary renaissance of the age. Their legends are written in chaste Sanskrit, often in verse, displaying high literary skill of its composer. The metres used are *Upagīti*, *Prithvī*, *Upajāti* and *Vamśasthabila*. Metrical legend, however, remains confined to the issues of the first three emperors, no successor of Kumāragupta I taking recourse to it.*

The legends which occur on both sides of the coins often give an ornamental grace to the device. In some cases, of course, the letters are somewhat cramped for want of space, and their forms are slightly distorted. But more unfortunate is another technical flaw which relates to the manufacture of the coin-blanks. They are generally smaller than the dies, with the result that the legends around the device, specially on the obverse, are often partially off the flans. And this has in some cases baffled scholars to read the legends of some important but controversial types.

Gold coins of the Guptas follow the Kuṣāṇa standard of about 121 grains, which again was but a modification of the Roman gold standard of about the same weight. The Gupta silver coins, on the other hand, followed the 20-*rati* standard of the Indo-Greek bilingual drachms. The rare copper issues of the Gupta monarchs evidently adopted some indigenous weight system; but so diverse are their weights that it is difficult to be sure of their exact standard and of the denominations issued.

Samudragupta, son of Candragupta I, who really laid the foundation of the Gupta empire of Magadha, was probably the first to strike coins—and strike them in the universally coveted

*[The statement is inaccurate since metrical legends are noticed not only on the coins of Kumāragupta's successors like Skandagupta and Budhagupta, but also of later dynasties like the Maukharis, Hūṇas, Kosalas and Puṣyabhūti. See below.—Ed.]

yellow metal. The abundance of his gold coins indicates the height of prosperity that his government achieved. He introduced at least six interesting types, viz. the Standard, Archer, Battle-axe, *Aśvamedha*, Tiger-slayer and Lyrist types, besides the controversial Candragupta-Kumāradevi and Kāca coins. Of these, Candragupta II Vikramāditya retained only the Archer and Standard types, but struck another six new ones, viz. the Lion-slayer, Horseman, *Chatra*, Couch, King-and-Queen and *Cakravikrama* types. He also struck the Garuḍa-type silver coins for his newly conquered western territories and introduced a copper currency.

Kumārāgupta I, on his part, also introduced six more new types, viz. the Kārttikeya, Swordsman, *Apratigha*, Rhinoceros-slayer, Elephant-rider and Elephant-rider-and-Lion-slayer types, besides retaining eight of the characteristic types of his father and grandfather. In silver, Kumārāgupta I not only issued the Garuḍa type, but also introduced the Peacock and two other new ones. He also struck quite a few types in copper.

But Gupta coins after Kumārāgupta I lapsed into a painfully monotonous mediocrity, losing all their characteristic vitality and variety as happened with the coins of Kuṣāṇa Vāsudeva and his successors. Skandagupta somehow maintained the tradition by striking coins in gold, silver and copper; but his gold types consisted only of the Archer, King-and-Queen and probably Horseman coins. His successors, i.e. the later Guptas, issued only a few gold coins and fewer silver pieces—in one or two common types.

C. Post-Gupta Coins. The types of the Post-Gupta pre-Muhammadan coins of Northern India follow certain conventions, three of which are directly connected with the coinages of the Kuṣāṇas, Guptas and Sassanians.

The virtually isolated Kashmir valley was so much influenced by the Kuṣāṇa coins of the type of the 'Standing King' and 'Seated Ardokhso' that it doggedly maintained the type in a

barbarously monotonous manner for well over a millennium. The conventional Kuṣāṇa type was used not only for gold, but also for rare silver and copious copper issues. For the gold coins, the *Dīnāra* standard of the Kuṣāṇas was closely followed, while for the copper coins a new 50-*rati* standard was introduced and maintained. But silver coins being few and far between, it is not possible to determine their standard.

The types of the Gupta coinage which represented India's finest numismatic achievement exercised considerable influence over gold, silver and copper coins of certain well-defined areas of Northern India. Coins of the Gupta type and/or fabric were widely copied in Eastern India, specially Bengal, while Gupta-type silver coins were closely imitated by the Maitrakas, Maukharis and Puṣyabhūti and two chiefs of the Northern Koṅkan and South Kosala. The Gupta type was also copied in copper in the Ramnagar area.

The Sassanian silver type of the 'Royal Bust' and 'Fire-altar' provided the model for the silver coins of Rajasthan and North-Western India for quite a long time. Of course, the type was often modified and suitably adapted in some cases; but even then the Sassanian influence manifested itself in the module and fabric of the coins as well as in their standard which followed the weight of the Attic drachms of 67.2 grains.

We have then the gold coins of certain regions of Central India which followed a fourth convention, incorporating the weight and, to some extent, the fabric of the Sassanian coins on the one hand and the Kuṣāṇa-Gupta reverse device of the 'Seated Goddess' on the other. This convention started, as generally believed, with Gāṅgeyadeva, the Kalacuri king of Dāhala, or perhaps with Mahīpāla the Gurjara-Pratihāra king of Kanauj. The obverse of these thin and broad-flan gold pieces bear in bold Nāgarī letters the name of the king, while the reverse has the crude figure of a seated goddess of the Ardokhso-Lakṣmī type. This 'Seated Goddess' type was copied in Central India as well as some areas of the North for quite a few centuries mainly in gold, but sometimes also in debased

gold and silver and copper. Coins of this type, even though in gold, were known as *Dramma*, and followed the weight of the Attic drachms of 67.2 grains as introduced by the Sassanians.

The fifth and the North-Western convention began with the Śāhī kings of Kabul and Ohind, who introduced a predominantly silver currency and the associate type of the 'Horseman and Bull'. The Horseman-Bull coins became immensely popular, so much so that they were copied for many centuries in North-Western and Northern India not only in silver, but also in debased silver (billon) and copper. These coins, often crude, throughout maintained the 32-*rati* standard.

(a) *Coinage of Kashmir*. The coinage of Kashmir, which closely followed the Kuṣāṇa convention, is almost a unique example of a currency remaining unchanged for a period of about twelve centuries from the time of Kaṇiṣka down to the Muhammadan conquest.

Besides the Kuṣāṇa coinage which duly circulated in Kashmir, the earliest known strictly Kashmirian coins belong to Kīṅgila-Narendrāditya, Toramāṇa and Mihirakula. Kīṅgila, though mentioned as a successor of Toramāṇa and Mihirakula, was probably the earliest of them all.

Coins of Kīṅgila are known in silver and copper. The unique silver piece of Ephthalite fabric shows the Head of the King and the legend, *Devaśāhi-Kīṅgila* on the obverse and some indistinct device on the reverse. Copper coins, which are quite small in size, have on the obverse the 'Crowned Head', and on the reverse a *ghaṭa* and the name, *Kīṅgila*. There are, again, some copper coins bearing the name of Narendrāditya, which according to the *Rājataranṅiṇī* was borne by Kīṅgila. These coins have on the reverse the crude figure of the Kuṣāṇa-type 'Standing King' under whose arm is the legend *Kidāra*, and on the reverse a similar crude figure of the 'Seated Goddess' Ardokhso and the legend, *Śrī-Narendra*. Coins of Toramāṇa are in copper, and bear on the obverse the figure of the 'Standing King' and the legend, *Śrī-Toramāṇa*, and on the reverse that

of the Seated Goddess. Toramāṇa also had similar copper coins besides some other copper coins of different types and a series of silver coins of the Sassanian fabric. The silver coins bear the king's head with the Bull-standard and a *triśūla* in front and the legend, *Jayatu Mihirakula* or *Jayatu Vṛṣadhvaja*.*

Pravarasena, whom the *Rājatarāṅgiṇī* makes the son of Mihirakula, bears a clearly Indianised name. But the 'Standing King' and 'Seated Goddess' type of coins that he and his six successors issued have, besides the royal name, an additional word, *Kidāra*—like the coins of Kīṅgila-Narendrāditya. This, Cunningham thought, was due to the fact that the family of Pravarasena belonged to the Kidāra tribe. But that may not have been the actual case. It is likely that these Kashmir kings while copying the coins of the Kidāra Kuṣāṇas, slavishly also copied the word *Kidāra* that invariably occurs below the arm of the standing king on the obverse.

However, even before the rise of kings of the Utpala dynasty, the Kuṣāṇa type of the 'Standing King' and 'Seated Goddess' was firmly established in Kashmir coinage—both in the rare gold and in the common copper issues. But with the accession of Śaṅkaravarman (833 A.D.), the first king of the Utpala dynasty, gold practically disappeared.**

From the time of Śaṅkaravarman, not only the evidently meaningless word *Kidāra* was removed from Kashmir coinage, but also a novelty in writing the royal name was introduced. The name of the king was not henceforth written on one side only ; it was continued from the obverse to the reverse, as in the case of one type of Pravarasena's coins.

However, even upto the end of Hindu rule, the crude monotony prevailed in Kashmir coinage. It was Harṣadeva who brought about some pleasant change by striking handsome gold coins in imitation of certain types of ornate gold issues of

*[Only *Vṛṣa* really occurs on the coins.—Ed.]

**[Śaṅkaravarman (883-902 A.D.), son of Avantivarman (856-83 A.D.), was the second king of his line.—Ed.]

Koṅgudeśa.* They bore on the obverse the figure of an elephant and on the reverse the legend, *Śrī-Harṣadeva*. This king also issued another gold type with the figure of 'a Horseman' and the legend *Śrī-Harṣadeva* on the obverse and the 'Seated Goddess' on the reverse.

(b) *Coins Imitated from the Gupta Types.* Gold coins struck in Eastern India, specially in Bengal, after the Gupta epoch were highly influenced by the Imperial Gupta coinage at least in fabric, if not always in type. One Virasena Kramāditya probably ruling in the Varanasi area, and three Bengal kings—Samācāradeva Narendrāditya, Śaśāṅka and Jayagupta Prakāṇḍayaśas—struck some gold or debased gold pieces with the well-known reverse device of Gupta gold coins, viz. the 'Seated Goddess' (Lakṣmī). Each of these princes, however, tried to maintain his individuality by introducing an uncommon device on the obverse or by issuing coins of an altogether new type. Thus, Virasena and Śaśāṅka introduced the Bull and the figure of Śiva respectively on the obverse of their coins, while Samācāradeva and Jayagupta issued the *Rājalīlā* and the King-and-Elephant types of gold coins.

We have then the imitations of the Gupta gold coins from Eastern Bengal. They bear on the obverse the figure of the 'Standing King', and on the reverse that of a 'Seated Goddess' who is depicted as two-handed on some coins and as eight-handed on others. The depiction of the devices is generally crude, and the legends are tantalisingly fragmentary, while the gold is often debased. But these interesting coins certainly represent the first national currency of Bengal. They follow the 50-*raṭi* standard of a particular series of Śaśāṅka's gold coins and even bear, like them, the border of thick dots, which fact shows that they succeeded the issues of Śaśāṅka. The uniformity of their type and fabric on the other hand indicates that they were the issues of the members of a single house. The two

*[This is wrong because the *Rājatarāṅgiṇī* clearly states that Harṣa issued *ṭaṅka* in imitation of Karnāṭa coins. See Sircar, *Studies in Indian Coins*, pp. 243 ff.—Ed.]

issuers of this unique series of coins are Sudhanyāditya and Pṛthuvīraja.*

We may here deal with some very thin and peculiar single-die (repousse) coins in gold with certain devices and legends written in ornamental box-headed characters. They are of two distinct series : one with the device of Garuḍa and names of Prasannamātra, Mahendrāditya and Kramāditya, and the other with the device of the 'Humped Bull' and the names Varāharāja, Bhavadatta and Arthapati.

The issuers of the Garuḍa-type coins have been taken to be scions of the Somavamśī dynasty of South Kośala.** Since the coins, specially of Mahendrāditya and Kramāditya, fall generally within the Gupta period and since *Mahendrāditya* and *Kramāditya* are the *birudas* respectively of the Gupta monarchs Kumāragupta I and Skandagupta, some scholars are tempted to believe that the coins bearing the legends *Śrī-Mahendrāditya* and *Śrī-Kramāditya* were issued by the two Gupta monarchs after the characteristic coins of Prasannamātra. But it does not seem likely that Kumāragupta I and Skandagupta had any real hold over South Kośala ; and even if they had, there is no reason why they would not put their names on the coins they issued there.

The issuers of the Bull-type coins, who evidently belonged to the same family, have been thought to be scions of the Nala dynasty ruling in the latter half of the fifth century A. D.*** in and around the Bastar District of Madhya Pradesh, where the coins are found and wherefrom some inscriptions of the family have also come.

It seems strange that such peculiar and tiny coins were struck for real commercial transactions. It is therefore held, perhaps rightly, that 'like the Nisar coins of the Muhammadan emperors they may have been issued as largess money'.

*[Correctly *Pṛthuvīraja*.—Ed.]

**[None of the three kings can be associated with the Soma-vaṃśa of Kosala.—Ed.]

***[In the sixth century A.D.—Ed.]

Silver types of the Guptas were also closely copied in Northern, Central and Western India. Three Maukhari kings, viz. Īśānavarman, Śarvavarman and Avantivarman, and two Puṣyabhūti kings, Pratāpaśīla-Prabhākaravardhana and Śīlāditya-Harṣavardhana, struck silver Indian drachms bearing on the obverse 'the King's Head to right or left', and a date, and on the reverse a 'Fantailed Peacock' to left or right along with a legend of set pattern reading, *vijit-āvanir = avanipati...* (king's name) *divaṃ jayati* in the style of the Gupta-type coins. 20-rati silver coins of the Hūṇa king Toramāṇa and the South Kosalan king Bhīmasena are also similar to these Maukhari and Puṣyabhūti coins. Their devices, fabric and legend-formula are evidently modelled on those of the Peacock-type silver coins of Skandagupta. We have then the 'Royal Head and Bull' type coins of the Rāṣṭrakūṭa king Kṛṣṇarāja of Northern Koṅkan,* which, but for the difference in the legend-formula, are similar to the Bull-type coins of Skandagupta. Silver Indian drachms of the Maitrakas of Valabhī are but replicas of the Altar-type coins of the Valabhī fabric issued by Kumāragupta I.

The types of the Gupta coins were as well imitated in copper in later times. One Harigupta, apparently a local ruler of the Ramnagar area (corresponding to ancient Pañcāla) imitated the *Chatra* type of the gold coins of Candragupta II; but unlike it, the coin of Harigupta has the figure of Garuḍa on the reverse. Harigupta also struck another type of copper coins with a flower** on the obverse and a two-line legend, *Mahārāja-Hariguptasya*, in characters of the sixth century on the reverse. Then an otherwise unknown chief of about the same period, whose name reads like Jayagupta, has left for us a unique copper piece with the bust on the obverse and the figure of Garuḍa on the reverse.

(c) *Coins Modelled on the Sassanian Issues.* The Hūṇas, who defeated and killed the Sassanian king Fīrūz in 484 A. D.

*[Northern Maharashtra.--Ed.]

**[*Pūrṇa-kumbha*.--Ed.]

and overran his territory before invading India,* modelled their coins struck¹ here on the characteristic Sassanian issues so distinguished by their thin broad fabric and the type of the 'King's Head and Fire-altar'. But though the Hūnas thus became instrumental in introducing Sassanian types in India, the existence of Sassanian-type coins with names of kings like Śāhī Tigin and legends in Pahlavī and Nāgarī indicating, 'king of India and Persia', prove beyond doubt that shortly after the Hūna invasion a Sassanian dynasty, or a dynasty acknowledging Persian suzerainty was established in North-Western India'.

However, the Sassanian-type coins became immensely popular in early medieval India, so much so that for many centuries coins of the Sassanian type and/or fabric were extensively issued in Rajasthan, Gujarat, Malwa, Uttar Pradesh and Bihar. They invariably followed the weight of the Sassanian silver drachms of the Attic standard, i.e. 67.2 grains.

Coins, strictly to be called 'Indo-Sassanian', are mainly anonymous and might have been struck by the members of various early Rajput dynasties. With the passing of times, these curious issues tended to be thicker and dummier and their devices more and more degraded. Thus finally were evolved the so called *Gadhaiyā-Paisā* of silver and copper—with flans so dumpy and devices so utterly crude. However, quite a number of sub-types were evolved out of the main Indo-Sassanian type. The following are a few of them.

The well-known silver *Śrī-Vigraha* coins represent an important sub-type of the Indo-Sassanian coinage. We see on their obverse the full or partial 'crude Bust of the King' and a two-line legend in bold letters, *Śrī-Vigraha*, and on the reverse what looks like a 'Fire-altar with an Attendant on each side' and the letter *sa* in the centre. They generally come from the region of the Monghyr District of Bihar. The fact that these coins are known in abundance and in various degrees of artistic merit indicate that they were issued for a long time. They are, how-

* [The Hūnas fought with Skandagupta (455-67 A.D.) earlier.—Ed.]

ever, associated with one or other of the Vigrahapālas of the Pāla dynasty.*

The *Ādivarāha* coins known only in silver are another sub-type of the Indo-Sassanian issues. Their obverse depict the figure of the *Varāha* incarnation of Viṣṇu with a solar wheel to the right, while the reverse has a two-line legend in bold characters reading *Śrīmadādivarāha*. These coins are also rather common and of various degrees of artistic merit. It appears that they were issued by Bhoja I of the Pratihāra dynasty, who is known to have assumed the title *Ādivarāha*, and continued for some time by others. We have then a few other *Ādivarāha* coins which bear the legend *śrī-Vināyakapāladeva*, attributable to Vināyakapāla, the grandson of Bhoja I.

There are, again, some other sub-types of Indo-Sassanian coins which as usual bear the Sassanian-type Bust of the King and various legends. One such series has the legend *śrī-Dāman*, a second *śrī-Oṃkāra*, and a third *śrī-Cittarājadēva*, while a fourth has the legend, *śrī-Somaladevī*. Coins with the third and fourth legends have respectively been attributed to Cittarāja, the Śīlāhara king of the South Koṅkan, and Somalekhā, the queen of the Cāhamāna king Ajayarāja.

Another interesting but obscure sub-variety of the Indo-Sassanian coinage is known from coins preserved in the Huzur Jawāhirkhānā of Indore, which bears on the obverse a number of lines and symbols around the Sassanian-type royal head and on the reverse 'the figure of a Horseman fighting with his sword raised over his head against two foot-soldiers, one of whom is fighting desperately from the front while the other is fallen'.

(d) *Coins of the 'Seated Goddess' Type*. As noted earlier, coins with the type of 'boldly written legend' and the 'Seated God-

*[The identification of the original issuer of the Śrī-Vigraha coins, found in various areas and associated with Vigrahapāla and Vigrahatuṅga in the Siyadoni (Jhansi District, U.P.)¹ inscriptions, is uncertain.—Ed.]

dess' were introduced by Gāṅgeyadeva, the Kalacuri-Cedi king of Dābala. These coins became immediately popular ; for, not only rulers of the other Kalacuri-Cedi branch of South Kosala and of the Candella family of Jejākabhukti, but also of the Gāhaḍavāla dynasty of Kanauj, the Cāhamāna family of Śākambharī and even the Tomara house of the Hariyana area struck these 'Seated Goddess' type of coins.

Coins bearing the names of some kings, specially of Gāṅgeyadeva, were struck for a considerably long period after their death. This is clearly proved by the staggering profusion of the specimens concerned, and considerable degrees of degradation of their devices, of debasement of their metal contents, and of gradual reduction of their weights. In fact, with regard to the metal contents of the coins bearing the name of Gāṅgeyadeva alone, D. W. MacDowall points out that 'the metal of these coins varies from gold to base gold, silver, gilt silver, silvered copper and copper, and the differences in the metal are so little and imperceptible that it is difficult to believe that they were issued as gold, silver or copper coins as part of the same monetary system under any one king'. It is, however, clear that Gāṅgeyadeva himself struck coins in all the three metals, viz. gold, silver and copper.

Of the Candellas, Kīrtivarman was the first to strike coins and that too of the 'Seated Goddess' type—after the issues of Gāṅgeyadeva. All his successors who issued coins in gold, viz. Sallakṣaṇavarman, Madanavarman, Paramardin, Trailokyavarman and Viravarman, used for them the 'Seated Goddess' type. Of Madanavarman alone are known some silver coins of the 'Seated Goddess' type, while for Madanavarman and Viravarman we have, again, some copper pieces of the same 'Seated Goddess' device. Sallakṣaṇavarman introduced in copper a characteristic type which has the legend on the obverse and the figure of 'Hanumat under a Canopy' on the reverse. These Hanumat-type copper coins were issued by Jayavarman, Pṛthvīvarman and Madanavarman.

Of the Gāhaḍavālas, only two kings, Madanapāla and Govindacandra, issued coins. But while the former struck silver coins of the Horseman-Bull type, the latter issued gold and silver coins of the device of 'Seated Goddess'. The gold pieces of Govindacandra, however, have a 'Trident' below the obverse legend. Of the Cāhamānas, Ajayarāja alone issued some 'Seated Goddess' coins in silver ; but the legend of his coins calls him Śrī-Ajayadeva.

There are differences of opinion about the dynastic affiliation of the three kings bearing the names of Ajayapāla, Kumārapāla and Mahīpāla who issued coins of the 'Seated Goddess' type. While they are generally believed to have belonged to the Tomara family of the Delhi area, some scholars doubt this attribution because of the facts that other members of the Tomara family do not use the 'Seated Goddess' device for their coins and the 'Seated Goddess' coins bearing the name of the kings concerned do not generally come from the area where the Tomaras ruled. However, Kumārapāla and Mahīpāla have left for us gold coins of the 'Seated Goddess' type, while we have 'Seated Goddess' coins in silver with the names of Ajayapāla and Mahīpāla.

(e) *Horseman-Bull Coins.* Though the Śāhī kings of Kabul and Ohind are rightly credited with the introduction of the well-known 'Horseman and Bull' type, both the Bull and the Horseman, taken individually, are known devices of ancient Indian coins. The Horseman type evidently, started with the foreign Indo-Greek rulers, but the Bull device is much more ancient, since the archaic punch-marked coins, as also the earliest of the Indo-Greek issues, bear the figure of the Indian 'Humped Bull'. However, the type, 'Horseman and Bull', as used on the silver coins of the Śāhī kings of Kabul and Ohind like Śpalapatideva and Sāmantadeva, was very soon highly popular with the kings of North-Western India and the type was used mainly for silver and silver-based coins and often for issues in copper as well. We thus see the type of the 'Horse-

man and Bull' on the monetary issues of the Tomaras of the Delhi region, of the Cāhamānas of Śākambharī, Jālor and Nāḍol, and of Madanapāla and Amṛtapāla, kings respectively of the Gāhaḍavāla family of Kanauj and the Rāṣṭrakūṭa house of Badaun.

The Horseman-Bull coins were issued by Śpalapatideva and Sāmantadeva both in silver and in copper. But the profusion of the coins bearing the legend, *Śrī-Sāmantadeva* and the various degrees of their degeneration indicate that the Sāmantadeva coins were minted for a long time even after the death of Sāmantadeva. Besides the coins of Śpalapatideva and Sāmantadeva, there are those bearing the legends, *Śrī-Khudavayakaḥ* and *Śrī-Bhīmadeva*. Some scholars think that *Śpalapati* and *Sāmanta* are not names but titles, while others believe that Śpalapati and Sāmanta were the same person. The name Khudavayaka is an enigma. These and some others supposed Śāhī kings like Vakkadeva also issued some copper coins that bear on the obverse an 'Elephant' and on the reverse a 'Lion', while another king named Kamara, struck some copper pieces with a 'Peacock' on the obverse and a 'Lion' on the reverse.

It is interesting to note that, on the reverse Bull side of many later Horseman-Bull coins, we see the legend, *Śrī-Sāmantadeva*, which is evidently meaningless and superfluous. As it appears, the engravers of these coins while designing them slavishly also copied the legend of the Sāmantadeva prototypes. But, curiously enough, the coins of Gāhaḍavāla Madanapāla have yet another extra word, *Mādhava* before the words *Śrī-Sāmantadeva*. On the coins, again, of the Cāhamana king Pṛthvīrāja and the Jajapella chief Cāhaḍa, we find the words *Āśāpurī Śrī-Sāmantadeva*. It is not easy to determine the meaning of the words *Mādhava* and *Āśāpurī* on these coins. Then, again, we have some coins of Pṛthvīrāja which replace the words *Āśāpurī Śrī-Sāmantadeva* by the words *Śrī-Mahamada Sāma*.

However, it is well-known that the Horseman-Bull issues were ultimately copied extensively by the early Muhammadan rulers.*

*References. J. Allan, [*British Museum*] *Catalogue of the Coins of Ancient India*, and [*British Museum*] *Catalogue of the Coins of the Gupta Dynasties, etc.*; Durga Prasad, 'Classification and Significance of the Symbols on Silver Punch-marked Coins of Ancient India', in *Num. Suppl.*, No. XLV, and 'Observations on Different Types of Punch-marked Coins, their Periods and Locale', *ibid.*, No. XLVII; A. N. Lahiri, 'Foreign Influence and Local Coins' in *Seminar Papers on the Local Coins of Northern India*, pp. 203-16, and 'The Punch-marked Coins and the Questions of their Prototypes' in *JNSI*, Vol. XXX, pp. 14-22; Lallanji Gopal, *Early Medieval Coins of Northern India*; V. A. Smith, *Catalogue of Coins in the Indian Museum, Calcutta*, Vol. I. [In the title of Gopal's work, read 'Coin-types' for 'Coins'.—Ed.]

IV

EARLY INDIGENOUS COINS OF SOUTH INDIA

Sm. Bela Lahiri, Jadavpur University.

The Study of South Indian coins has attracted comparatively far little attention from scholars. The Northern coinages have been greatly influenced by foreign currencies with which they very often came into contact. But South Indian coins evolved in an indigenous way, practically free from any outside influence. Thus, there is a marked difference between the currency systems of the North and the South.

Broadly speaking, South India denotes Peninsular India to the south of the Vindhya. This vast region is again sub-divided into two well-marked geographical divisions, viz., the Deccan and the Far South, demarcated by the river Kṛṣṇā. The coinages of these two regions are also somewhat different. The numismatic issues of the Śātavāhana dynasty of the Deccan are more akin to the Northern coinages than to those of the Tamil States of the Far South.

Characteristics of the South Indian Coins. There are some well-marked characteristics of the South Indian coinage. The evolution of South Indian coins from the punch-marked system to the die-system followed the indigenous method and was not the result of the impact of foreign die-struck coins. The punch-marked system was revived in South India long after the die-system had been current, and continued there for a longer period. We can trace the various stages in the gradual evolution of the gold coins in South India from the spherules with one or more minute punches to the flat, round, thicker pieces called *Padma-taṅka* on which a large Lotus is struck on the obverse in the centre with other punches around, usually four in number, struck afterwards. The punches appear first on the obverse only, later on both the obverse and reverse. They often

become cup-shaped because of the striking process. It is a curious combination of the old punch technique and the crude die method. *Padma-taṅkas* of superior workmanship continued till a very late period and ultimately gave way to the double-die system of which the Vijayanagara *Pagodas* are the best examples.

As already noted, the Northern and Southern coinages are widely different from each other, neither having much impact on the other. The only exception is in the case of Harṣa of Kashmir who copied the 'Elephant' *Pagodas* of the Gajapati dynasty of Koṅgudeśa in *Fanam* denomination.* The main difference between the currency systems of the South and the North is that foreign coinages exerted hardly any influence on the coins of South India, while they modified to a great extent the numismatic issues of the North. But although there was practically no impact of foreign currency in South India, Roman gold aureus and silver denarius of the early centuries of the Christian era are discovered in plenty in South India. Smaller copper coins with Roman devices and legends are supposed to have been locally struck by the foreign settlers in India. The abundance of Roman coins reflect the prosperous condition of South India's trade with Rome during that period. The Roman gold and silver coins were used as current coins in South India, while they provided the metal for the Kuṣāṇa and other native coins in North India. The Roman coins became so popular in South India that even after the ninth century, inscriptions record the gift of *Dināras* and *Drammas* (from Greek *Drachme*) for religious and charitable benefactions.**

Another characteristic feature of South Indian currency is that gold and copper were used exclusively for coins. Silver which was relatively scarce was rarely used for striking coins.***

* [For the mistakes in this statement, see above, p. 69, note, and Sircar, *Studies in Indian Coins*, pp. 243 ff.—Ed.]

** [The said coin names are also found in the medieval epigraphic and literary records of Northern India.—Ed.]

*** [See above, p. 50, note.—Ed.]

The Śātavāhanas and their feudatories had a fancy for such low-valued metals as lead and potin, a curious admixture of 'red and yellow copper, lead, tin and some dross'. As noted by the *Periplus of the Erythraean Sea*, tin and lead were among the imports of Barygaza and Nelcynda and this might be the reason why lead was used exclusively as metal for the standard currency in the Upper Deccan. The people of that region were so much accustomed to it that even the European powers in a later period used lead as a medium of currency.

The weight standard is also peculiar to South India. There were two denominations in gold. One was the *Hūn*, *Varāha* or *Pagoda* weighing 50 to 60 grains, based on the *Kalañju* seed, and the other was the *Paṇam* or *Fanam* ($\frac{1}{10}$ of a *Pagoda*) weighing 5 to 6 grains, based on the *Mañjāḍi* seed. The North Indian *Raktikā* standard had thus no place in South India.* The silver punch-marked coins of the South, however, followed the uniform 32-*rati* (52 grains) standard of the North, thus being equivalent to the South Indian *Kalañju* weight of 50 to 60 grains. Other rare silver coins in the South followed the gold standard. The silver *Cakram* of Travancore is equal in weight to a [gold] *Fanam*. The copper standard was generally known as *Kāśu*, which was $\frac{1}{80}$ of a *Fanam* or *Paṇa* and probably identifiable with Sanskrit *Kārṣāpaṇa* and which later on became *Cash* in English during the time of the East India Company.

There are some difficulties in the study of South Indian coins. The number and variety of these coins are not very large as compared to the North Indian issues. There is no sure clue to attribution in many cases. Legends on the coins are rare and short, hence identification and attribution of these coins are often difficult. The only guiding factors are provenance, the area of circulation and the symbols characteristic of a dynasty. But these are not dependable guides in all instances, for the symbols of one dynasty are sometimes incorporated in

*[*Mañjetthi* or *Majjāṭikā* (i.e. *Mañjāḍi*) was often regarded as a synonym of *Māṣaka* of 2 *Ratis*.—Ed.]

the coin-devices of another. In that case, however, it may signify the intimate connection of the two dynasties either by marriage or by conquest.

For various reasons, South Indian coins are unimpressive and their study unattractive. Being free from the impact of foreign currencies, the South Indian coins lack the artistic excellence of certain series of North Indian coins. This is so, because they are impressed more commonly on inferior metals like lead, potin and copper and, being issued with conventional rigidity, lack the variety of types, and very rarely bear human devices. Excepting a few 20-rati silver portrait coins issued by the Śātavāhana rulers and some of their successors, in imitation of the W. Kṣatrapa silver coins, we do not find in South India any series of portrait coins comparable to the excellent series of gold and silver coins of the Guptas and some of their successors.

The South Indian issues may be broadly classified into the following categories—I. *Early Uninscribed Coins* and II. *Inscribed Coins*, the latter subdivided as follows : A. *Coinage of the Deccan* : (1) the Śātavāhanas ; (2) the Feudatories of the Śātavāhanas ; (3) the Successors of the Śātavāhanas, viz., the Ikṣvākus, Viṣṇukuṇḍins, Ābhīras, Traikūṭakas and Bodhis ; and (4) the Later Dynasties, e.g., the Cālukyas of Bādāmi, Kalyāṇa and Veṅgī, the Kadambas of Mysore and Kanara, Kalacuris of Madhya Bharat and Kalyāṇa, and the Gaṅgas of Kalinga ; and B. *Coinage of the Far South* such as that of (1) the Pallavas ; (2) the Pāṇḍyas ; (3) the Ceras, and (4) the Colas.

I. **Early Uninscribed Coins.** So far as the archaic or the earliest uninscribed issues of the South are concerned, they may be grouped into four categories : (1) some early gold and copper spherules, (2) various early silver coins of the pre-Maurya period, (3) regular five-symbol punch-marked issues, and (4) die-struck copper pieces. We do not find in South India coins similar to the so-called Bent-bar or Wheel-marked pieces or coins which are prepared by the casting

process.* Punch-marked copper pieces are not so far known in South India. Lack of information renders it difficult for us to make any evaluation of the archaic coins of South India in respect of their origin, authorship and area of circulation.

The earliest indigenous gold coins were the spherules of *Kaṭāñju* weight (about 52 grains), with four very minute dots punched on the obverse and plain reverse. These pieces appear to have been in use for a considerable period. There were some early copper globules of this type also. They weigh between 16 and 61 grains and even smaller pieces are known. Their weight-standard appear to have been based on the *Kaṭāñju*. The gold and copper globules might have been used by the Pāṇḍyas before they issued their own coins.

Among the various earlier types of silver coins may be mentioned the round specimens found at Sultanpur near Wai in the Satara District. They were issued in double, single and half *Kaṭāñju* standard, and have one symbol on the obverse while the reverse is plain. They are a little saucer-shaped because of the striking process. Coins of the Singavaram hoard also appear to be earlier and are of the saucer-shaped variety. They were apparently of the half *Kāṛṣāpaṇa* or *Kaṭāñju* standard, weighing from 20 to 30 grains. They bear four symbols on one side only, like some archaic four-symbol coins of the North which, however, were struck on the 24-*rati* (43.2 grains) standard. They also bear some resemblance in point of weight and symbols with coins of the Sonpur hoard of Orissa. Altekar suggested that the Sonpur coins were later on imitated in the Deccan. The specimens of the Konkan find may also be mentioned here. They are squarish in shape and are probably quarter *Kāṛṣāpaṇas* (about 15 grains). They generally bear the figure of a Bull surrounded by a border of symbols on the obverse and other symbols on the reverse. All the above-mentioned types appear to be pre-Maurya and might have been the issues of the different *janapadas* of the Deccan, viz. Aśmaka, Mūlaka, Andhraka, etc.

* [But see Gupta, *Punch-marked Coins in A.P.G. Mus.*, pp. 130ff.—Ed.]

As in the North, the earliest centrally organised regular coinage is represented by the 5-symbol punch-marked silver pieces. They are of both the pre-Maurya and Maurya periods and are sometimes found to be circulating contemporaneously. The South Indian punch-marked coins are generally much worn, thin and smooth. As already noted, they follow the South Indian *Kaṭāñju* standard of weight (about 52 grains), being equivalent to the 32-rati *Kārṣāpaṇas* of the North. This standard exerted much influence on the later 'Fish', 'Boar' or 'Tiger' type coins of the South. Various hoards of the silver punch-marked coins in South India have since been recorded. It is to be noted that the earliest find (Coimbatore District) as well as the biggest hoard (Amarāvati) of punch-marked coins come from the South. P. L. Gupta, however, thinks that all the punch-marked coins of the South had travelled from the North, and that there was hardly any local mint in the South. He also holds that it was only after the fall of the Mauryas that the Pāṇḍyas issued some local five-symbol silver punch-marked coins which weigh 16 to 30 grains and were probably half-*Paṇas*.

Next a series of copper die-struck pieces are occasionally found in South India, particularly in Andhra, the Pāṇḍyan territories and Ceylon. They occur in three sizes, the largest weighing 180 grains. The Pāṇḍyan die-struck copper pieces are rectangular and bear devices like the figure of an Elephant with or without Rider and Attendants, Bull, Horse, sacred Tree and other symbols. Most of these symbols are similar to those found on early uninscribed die-struck coins of North India. The Andhra die-struck pieces generally have one symbol on each side. The symbols found on these coins are mostly the Mountain symbol of various forms, *Nandipada*, *Svastika*, *Śrīvatsa*, Bull, Tree-in-railing, etc.

II. Inscribed Coins

Next in order come the inscribed issues of South India, which, like their uninscribed counterparts, lack the variety and

vigour which have made the numismatic issues of the North so much interesting.

A. Coinage of the Deccan

(i) *Śātavāhana Coins.* Of the inscribed coins, the Śātavāhana issues are the earliest. They have greater affinity to the Northern than to the southern coinages. The standard metals used by them were lead, copper and potin. There are also a few very rare silver portrait coins struck on the model of the Western Satraps' issues. The Śātavāhana coins are generally round, and die-struck ; but we know of some potin and copper pieces which are square and, again, some potin issues which are cast. The weight and size of the coins vary so much that it is difficult to determine the weight standard and the denominations. The legends are in Prakrit and written in the Brāhmī script; there are, of course, local varieties of the language and script. One characteristic feature of the Śātavāhana coins is that the honorifics *śrī* and *rājan* are generally attached to the king's name sometimes along with the metronymics as well.

The commonest symbols which appear throughout the series in spite of local varieties, are the so-called Ujjain symbol and Mountain sybol, which therefore appear to be the dynastic emblems.

According to provenances and local peculiarities, the coinage of the Śātavāhanas may be classified into the following groups :

- | | |
|--|---|
| Andhra Pradesh : | (a) District of Fabric A |
| | (b) District of Fabric B |
| | (c) Uncertain |
| Madhya Pradesh* : | (a) Chanda District |
| | (b) Tarhala in the Akola District,
Berar |
| Coromandel Coast between Madras and Cuddalore. | |
| Mysore : | (a) Chitradurga (Chitaldrug) District |
| | (b) Chandravalli (Chitradurga District) |

* [Correctly, Maharashtra.—Ed.]

North Maharashtra : Nasik District

Aparānta (North Konkan) : Surāṣṭra Fabric

Malwa

Western India (District uncertain) : (a) District of Group A
(E. Malwa ?)

(b) District of Group B

The difference of fabric in the coinage of Andhra Pradesh was most probably due to the difference in the districts of circulation—one representing the Godavari District, the other representing the Krishna District. Coins of Fabric A are of more uniform thickness; their obverse type is in lower relief, and inscription more carefully written; the size is generally smaller. The general type of the coins of Fabric A is the 'Mountain' on the obverse and the 'Ujjain symbol' on the reverse with varieties in their formation according to personal choice. Coins of Fabric B has 'Horse' or 'Elephant' on the obverse and Ujjain symbol on the reverse. Of the kings represented, the names of Pulumāvi, Śrī-Candra-śāti and Yajñaśrī* appear on both. The earliest king represented in Andhra Pradesh might have been Gautamīputra, whose coins are reported to have been found there in recent times.

The coins of Madhya Bharat** are distinguished both by type and metal. They are of potin (an alloy of yellow and red copper, lead, tin and some dross) and have for their types 'Elephant with upraised trunk' on the obverse and 'Ujjain symbol' on the reverse, and are the same throughout. Many kings (some of them new and not listed in the Purāṇas), downwards from Gautamīputra Śātakarṇi, the twenty-third Śātavāhanam monarch, are represented in the coins coming from Madhya Bharat. While the coins of the Chanda hoard are cast, those of the Tarhala hoard are die-struck. Metronymics are not used on these coins.

The lead coins having as their types 'Ship' on the obverse and 'Ujjain symbol' on the reverse come mainly from the

* [Correctly, Yajña here as well as elsewhere.—Ed.]

** [Correctly, Maharashtra here and elsewhere. See above.—Ed.]

Coromandel coast and are attributed to Pulumāvi, while some other recently discovered coins of the same type belong to Yajñaśrī. These coins indicate, according to Rapson, the temporary extension of Śātavāhana power over the coastal region which was once under the Colas and later came under the Pallavas. The Ship-type coins, doubtfully attributed to the Pallavas and Kurumbars, were probably imitated from the Śātavāhana issues of this type. The type indicates maritime traffic and therefore reflects the prosperous naval trade of the region.

About two-thirds of the large hoard of 13,250 coins from Jogalthembi in the Nasik District consist of silver pieces of Nahapāna restruck by his conqueror Gautamīputra, with his emblems, 'Mountain symbol' on the obverse and 'Ujjain symbol' on the reverse. So far only one other silver coin having these types (Six-arched Mountain and Ujjain symbols) and coming from Ujjain is known, which was used as independent money, and not a restruck one. The issuer was also Gautamīputra, but we are not sure if it belonged to Gautamīputra Śātakari or Gautamīputra Yajñaśrī Śātakarṇi.

Besides the above-mentioned original silver coin of Gautamīputra and another unattributable silver coin coming from Balpur in the Raigrah District, some eleven other silver coins of the Śātavāhanas are known, all coming from the Western Deccan region (Sopara, etc.). These are the only portrait coins of the Śātavāhanas so far known. They were struck on the model of the Western Satraps' silver coinage and follow its 20-*ratī* standard and fabric. But the silver coins of the Śātavāhanas have no doubt some peculiarities of their own. The obverse portrait is executed in the Indian fashion showing the bare head of the king wearing a crest-jewell and some ear-ornaments. The meaningless Greek legend is replaced by a clear Prakrit legend written in the Brāhmī script. On the reverse appears the Ujjain symbol, the dynastic emblem of the Śātavāhanas and the Dravidian Prakrit rendering of the obverse legend written in Southern Brāhmī letters, in place of

the Kharoṣṭhī legend. The reverse legend could not be properly deciphered until D. C. Sircar succeeded in reading it correctly. Besides Gautamīputra Śātakarṇi, the other Śātavāhana rulers who are so far known to have issued silver coins are Vāsiṣṭhīputra Pulumāvi (possibly), Vāsiṣṭhīputra Śātakarṇi, and Gaumtamīputra Yajñaśrī. The legends as read by D. C. Sircar on the coins of Vāsiṣṭhīputra Śātakarṇi are as follows :

Obverse : *Raño Vāsiṣṭhīputasa Siri-Sātakaṇiṣa.*

Reverse : *Arahaṇaṣa Vah[i]ṭṭi-mākaṇaṣa tiru-Hātakaṇiṣa,*
“[Coin] of the king Vāsiṣṭhīputra Śrī-Śātakarṇi.”

The legends on the coins of Yajñaśrī are as follows :

Obverse : *Raño Gotamīputasa siri-Yaṇa-Sātakaṇiṣa.*

Reverse : *Arahaṇaṣa Gotamīputaṣa Hiru-Yaṇa-Hātakaṇiṣa.*

The use of the Dravidian words *arahaṇaṣa* for *raño*, *mākaṇaṣa* for *putrasa*, *Vahitṭi* for *Vāsiṣṭhī*, *Tiru* or *Hiru* for *Śrī*, and *Hātakaṇi* for *Śātakarṇi* is very interesting.

These few silver coins of the Śātavāhanas were evidently intended for circulation in the territories once occupied by the Western Satraps and reclaimed by Gautamīputra.

The earliest Śātavāhana coins, so far noted, come from Malwa bearing the legend *Raño Siri-Sātasa* and attributed to Śātakarṇi I. The device on them are Elephant, Mountain symbol, Tree-in-railing and ‘River with three Fishes’ on the obverse and ‘Man standing’ and Ujjain symbol on the reverse. These symbols connect them with the early punch-marked coins of the Malwa region. The coins are known both in lead and potin.

There are certain other coins which presumably belong to Western India, but whose districts are uncertain. Their fragmentary legends do not help us much in their attribution. Some coins in lead and copper with the legend *Sadavahana* (Śātavāhana) come from Kondapur in the Medak District of Hyderabad.* We do not know if this Śātavāhana was a predecessor of Simuka and the founder of the dynasty. He is not, however, mentioned in the Purāṇas.

* [Andhra Pradesh.—Ed.]

(ii) *Feudatories' Coins*. Besides the coins definitely attributable to the Śātavāhana kings, there are several other series of Andhra-type issues which were probably struck by their feudatories some of whom might have been contemporaries of, and some later than, the Śātavāhanas. These feudatories' coins were modelled on the Śātavāhana issues. The devices on them are almost the same, with the exception of the dynastic emblem of the Śātavāhanas, e. g., the Ujjain symbol, which is replaced by the Tree-within-railing in almost all cases. The 'Mountain symbol' is common to both the series, signifying thereby the close connection between the two.

The feudatory families which struck coins are :

- (1) family of Hāritīputra—of the Anantapur and Cuddapah Districts,
- (2) Mahārāthis of the Sadakana family of Chandravalli and the Chitaldrug District of Mysore,
- (3) the Ānandas of Karwar,
- (4) the Kuras of Kolhapur,
- (5) the so-called Mahāsenāpatis of the Sagama family of Kondapur and Maski, and
- (6) the Mahāgrāmikas.

The lead coins from the Anantapur and Cuddapah Districts having a 'Horse' for their obverse type and 'Mountain and Tree' as the reverse type and with the fragmentary legend *Hāritīputra* should probably be attributed to one of the feudatory lines.

The large lead coins bearing the devices of 'Humped Bull to left' on the obverse and 'Tree and Three-arched Mountain' on the reverse come from Chadravalli and the Chitaldrug District of Mysore. They belong to the family of Sadakana Kalalāya Mahārāṭhi who might have been connected with the Mahārāṭhi mentioned in the Nānāghāṭ inscription of Nāganikā. The names of four generations of rulers are so far known from the above coins : (1) Sadakana Kalalāya Mahārāṭhi, (2) Sadakana Kaṇha Mahārāṭhi, (3) Sadakana Cuṭukanha

Mahārāṭhi, and (4) an anonymous Mahārāṭhi. *Sadakana* might stand for *Śātakarṇi* or *Śātakānām*.

The large lead coins coming from Karwar in North Kanara are attributed to the family of the Ānandas. They bear on the obverse a Three-arched Mountain and on the reverse Tree-within-railing. Two kings are represented, viz. (1) *Rājan* Cuṭukaḍānanda and (2) *Rājan* Muḍānanda. It is not certain if this Cuṭukaḍānanda can be indentified with Hāritīputra Viṣṇukaḍa Cuṭukulānanda of the Malavalli inscription. The coins are contemporary with those of Sadakana Kalalāya Mahārāṭhi.

The lead or potin coins coming from the Kolhapur District in Southern Maharashtra and attributed to a Kura family are distinguished from other Andhra coins by their types, and metronymics borne by their issuers. They bear on the obverse a Ten-arched Mountain, Tree-within-railing and *Svastika* and on the reverse Bow and Arrow. Three rulers are represented in the legends :

- (1) *Raño Vāsiṭhiputasa Viḷivāyakurasa,*
- (2) *Raño Māḍhariputasa Sivalakurasa, and*
- (3) *Raño Gotamiputasa Viḷivāyakurasa.*

Various suggestions have been made as to the indentification of these rulers and the interpretation of their peculiar names. The Brahmapuri hoard, however, which contains coins of both the Śātavāhana rulers and the Kura kings, appears to have precluded the possibility that these Kura coins were struck by the Śātavāhana rulers with different titles. Kura coins are also found in the Chandravalli (Mysore) hoard. The title *Rājan* adopted by these rulers as well as by the Ānandas of Karwar show that they had a semi-independent status.

Some coins with fragmentary legends coming from the Kondapur and Maski excavations and from Hyderabad, published by V. V. Mirashi, were at first attributed by him to one Śaka ruler, Māna, belonging to a Mahiṣa dynasty. Later on another coin with the complete legend *Mahāsenāpatisa Bhara-dajaputasa Saga-Māna Cuḷukulasa* led him to interpret it as the coin of 'the Mahāsenāpati Śaka Māna, the son of Bharadvāja,

who is of the Cuṭu family'. But D. C. Sircar has given its correct interpretation as 'the coin of *Mahāsenāpati Bhāradvājīputra* Cuṭukula of the Sagama (Saṅgama) dynasty', thereby taking Cuṭukula as the proper name of the king and Sagama as that of the dynasty to which he belonged. The use of the metronymic also shows that the issuer of the coin concerned could not be a Śaka. It may be noted that Cuṭukula as a proper name is also suggested by the coins of the Ānanda family of Karwar.

Again, some roundish lead coins dug up from the Kondapur excavations refer to another coin-issuing official. The fragmentary legend of these coins was read by V. V. Mirashi as *Sa(Su)mahagamakasa ma[ha]...*; but D. C. Sircar corrected the reading of the legend as *Mahagama(mi)kasa Māṭhariputa...sa*, i.e. *Mahāgrāmikasya Māṭhariputrasaya ...sya*, 'Of *Mahāgrāmika* Māṭhariputra...(name of the issuer)'. Sircar thus pointed out that the coin was issued by an official, designated as *Mahāgrāmika*, whose metronymic was *Māṭhariputra*, but whose name is lost. We thus see that various high officials of the Śātavāhanas like the *Mahārāṣṭrins*, *Mahāsenāpatīs* and *Mahāgrāmikas* took advantage of the declining power of their masters and emerged as independent rulers and issuers of coins.

(iii) *Successors of the Śātavāhanas.* Of the successors of the Śātavāhanas in the Deccan, coins are known of the Ikṣvākus, the Śālaṅkāyanas, the Viṣṇukunḍins, Ābhīra Īśvaradatta, the Traikūṭakas and the Bodhis. The Ikṣvākus who ruled in the Krishna region* struck crude lead coins in imitation of the Śātavāhana issues, having an Elephant on the obverse and Ujjain symbol on the reverse. Coins found in that region with the inscription *Siri-Ruda...* (attributed to the Śātavāhanas) were probably the issues of Śrī-Rudrapuruṣadatta of the Ikṣvāku family. Other coins from Nāgārjunikoṇḍa reveal the

* [Krishna and Guntur Districts.—Ed.]

reverse type of a Mountain symbol like the one seen on the issues of Cāntamūla, Virapuruṣadatta, Ehuṣula Cāntamūla and Rudrapuruṣadatta.

Copper coins of Candravarman* of the Śālaṅkāyana dynasty are known.

The legendless die-struck round copper coins bearing the devices of 'a Lion inside a Circle' on the obverse and 'a Vase or *Kalasa* flanked by a Lamp-stand on either side' on the reverse have been attributed to the Viṣṇukunḍins by Rama Rao and others. But according to other scholars these coins are to be ascribed to the Pallavas. It is, however, possible that the Viṣṇukunḍins imitated similar coins of the Pallavas. The biggest hoard of such coins, now housed in the Andhra Pradesh Government Museum, comes from the Nalgonda and Karimnagar Districts.

Mahākṣatrapa Īśvaradatta who was on the Western Kṣatrapa throne between the rule of Dāmasena (223-36 A. D.) and that of Yaśodāman I (238 A. D.), struck a few coins in imitation of the Western Kṣatrapa issues in the years 1 and 2, showing thereby that he ruled only for two years (236-38 A. D.)

The Traikūṭakas ruled in South Gujarat and the Konkan in the latter half of the fifth century A. D. Traikūṭaka coins are found not only in South Gujarat and the Konkan, but also in Maharashtra on the other side of the Ghats. The Traikūṭaka coins are close copies of the Western Kṣatrapa issues, which fact shows that they were meant for circulation in the territories which were once under the Western Kṣatrapas. Coins of two Traikūṭaka kings, Dahrasena, son of Indradatta, and Vyāghrasena, son of Dahrasena, are known.

The territory and the period of the Bodhis are uncertain. They seem to have ruled sometime after the Western Kṣatrapas in some regions of Western India, and their coins are closely connected with the Western Kṣatrapa issues. The Bodhi coins are of lead and are very small in size having for their

* [There is no Śālaṅkāyana named Candravarman. The name of Acaṇḍavarman was formerly read as *Caṇḍavarman*.—Ed.]

reverse type a Mountain symbol like the one seen on the issues of the Western Kṣatrapas. Coins of three kings, viz. Vīrabodhi, Śivabodhi and Candrabodhi are known, besides some uninscribed ones which are attributed to this family.

(iv) *Later Dynasties.* Next follow the coinages of the Cālukyas of three branches, viz. the Western Cākukyas of Bādāmi, the Later Cālukyas of Kalyāṇa and the Eastern Cālukyas of Veṅgī, as well as the issues of the Kadambas of Mysore and Kanara, the Kalacuris of Madhya Bharat and Kalyāṇa and the Gaṅgas of Kalinga.

(a) *Western Cālukyas.* The Cālukyas who ruled in the Deccan for about five centuries issued gold coins of the *Kaḷaṅju* standard, the royal emblem of all the three branches of the Cālukyas being the 'Boar'. The Boar-type Cālukya gold coins exerted so great an influence on the later South Indian issues that gold pieces even without the figure of the 'Boar' subsequently came to be known as *Varāha*. They were adopted in later times by the kings of the Vijayanagara dynasty, the Pāṇdyas of Madurai and petty local chiefs of the Carnatic. The Cālukya coins are remarkable in reviving the old method of punch-marking after a long period. In spite of the fact that the *Varāhas* of the Cālukyas had a great influence on the South Indian coins, very few of the numerous Cālukya kings are represented by their numismatic issues. The coins of the Western Cālukyas are of thick gold and are often saucer-like, probably imitated from the *Padma-ṭaṅkas* of the Kadambas. There are some anonymous Boar-type coins whose attribution is uncertain. On some of them appear six punches, the central one bearing a 'Boar', two having *śrī*, and the remaining three depicting a Lotus, a Conch and a Bow. Desikachari refers to a gold coin of about 65 grains having on its obverse 'a boar to left with the sun and moon and part of a scroll above, a scroll below, possibly representing the Yamunā and Gaṅgā, and also a device which may be *Pālidhvaja*. On the reverse there is a floral design...'

No coins are definitely attributable to any of the sovereigns of the line of the Western Cālukyas of Bādāmi. Of the Later

Cālukyas of Kalyāṇa, Jayasīrṇha II (Jagadekamalla, 1015-1043 A. D.), Someśvara I (Trailokyamalla, 1043-68 A. D.), Someśvara II (Bhuvanaikamalla, 1068-76 A. D.) and Vikramāditya VI (1076-1126 A. D.) are represented by coins. The reverse is blank. It is curious that the Cālukyan emblem of 'Boar' is not figured on any of this series. Of the nine punch-marks on the coins of Jagadekamalla and Someśvara I, five bear the figure of 'Lion', two have the syllable *Śrī* and the remaining two contain the title of the king in two parts. Jagadekamalla had another series of coins which bear eight punches, one in the centre and seven around. The central punch depicts a temple, while three of the surrounding ones have the syllable *Śrī*, and the other four, the title of the king in four parts. A number of *Fanams* bearing the figure of 'Lion', as on the coins of Trailokyamalla, and of a distinctively Cālukyan type with Kannada legend are known. The coins of Someśvara II and Vikramāditya VI depict different symbols. Of the nine punches on these coins, five bear the mark of a Lotus, two have the syllable *Śrī*, one shows the Sun and the Moon, and the ninth contains the name of the king. Some coins of a similar type are attributed to Bijjala Tribhuvanamalla who usurped the Cālukya throne (1156-81 A. D.).* Of the hoards of Cālukya coins, the Kodur and Nellore finds are remarkable.

(b) *Eastern Cālukyas*. Kubja Viṣṇuvardhana, founder of the Eastern Cālukya kingdom, seems to have struck coins in gold, silver and copper. Desikachari refers to a *Varāha* (apparently a gold coin) of the type of *Padma-taṅka* bearing the legend *Siddhi*, which, he believes, stands for *Viṣamasiddhi*, the title assumed by Kubja-Viṣṇuvardhana. Certain base silver coins bearing the legend *Viṣamasiddhi* are ascribed to the same king. They have the type 'Lion to right' on the obverse and 'double Trident surmounted by a Crescent and flanked by Lamps' on the reverse. Copper coins having the same

* [Bijjala ruled in 1156-68 A. D.—Ed.]

devices and the same legend, *Viṣamasiddhi*, are also known. Large flat single-type gold pieces with the figure of a Boar as the central device and bearing the names of Cālukyacandra (i.e. Śaktivarman, 1000-12 A.D.) and Rājarāja (1012-62 A.D.)* are fairly common. The coins of Śaktivarman are found in Burma and Siam besides South India.

Rājendra Kulottuṅga I (1070-1118 A. D.), who was an Eastern Cālukya prince and also a ruler of the Colas, struck coins with devices found on Cola issues, viz. a Seated Tiger, two Fishes and Bow, respectively the Cola, Pāṇḍya and Cera emblems. Some gold *Fanams* weighing from 6 to 7 grains with the above devices on the obverse bear the legend *Yuddhamalla* on the reverse. Since *Yuddhamalla* was the title adopted by more than one Cālukya prince, these coins are probably to be assigned to a Cālukya prince belonging to the period after the conquest of Veṅgī by the Colas. Certain *Pagodas*, *Fanams* and copper coins of earlier date with the 'Boar' device are attributed to the Eastern Cālukyas.

(c) *Kadambas*. The saucer-like gold *Pagodas*, known as *Padma-ṭaṅka*, so called because of the central device of a Lotus among various marks separately punched, were first struck by the Kadambas of Mysore and the Kanara region.* They were imitated by the Cālukya kings in striking their *Varāhas* and subsequently adopted by the Telugu-Coḍa chiefs of the Nellore District in the thirteenth century. There are many varieties of the *Padma-ṭaṅka* and their attribution is not always certain. A gold coin weighing 67.8 grains and bearing a fragmentary Nāgarī legend on the obverse and the figure of a 'heraldic-looking lion' on the reverse has been attributed to Jayakeśin III (c. 1187-1212 A. D.), a later Kadamba chief of Goa.

(d) *Kalacuris*. The Gupta-type 20-rati silver coins bearing the figure of a Bull and the legend *Paramamaheśvara-Mahādevyoh pādānudhyāta-Śrī-Kṛṣṇarāja* cannot be attributed to any of the

* [1019-61 A. D.—Ed.]

* [Correctly, Mysore now.—Ed.]

Rāṣṭrakūṭa kings of that name, as shown by Rapson. They are now assigned to the Kalacuri chief Kṛṣṇaraja, the father of Śaṅkaragaṇa. *Pagodas* and *Fanams* with a human figure on the obverse and the king's title in old Kannada on the reverse are attributed to Someśvara, the Kalacuri king of Kalyāṇa (1168-76 A.D.).

(e) *Gaṅgas of Kaliṅga*. *Fanams* of Anantavarman Coḍagaṅga of the Gaṅga dynasty which settled in Kaliṅga are known. They bear the figure of a Bull, Conch and Crescent on the obverse and the regnal date in Telugu on the reverse.

B. Coinage of the Far South.

(i) *Pallavas*. Of the dynasties of the Far South, the Pallavas were the earliest to issue coins. Their coins fall into two main classes : (1) those bearing the figure of a Bull, and (2) those having the figure of a Lion. Coins of Class I are thin die-struck pieces of copper bearing on the obverse the figure of a Bull and some stray letters and on the reverse a symbol, such as Tree, Ship, Star, Crab or Fish. Elliot's attribution of these issues to the Kurumbars or the Kalabhras is disputed by modern scholars who ascribe them to the Pallavas because of the occurrence of the Bull which was the *lāṅchana* of the Pallava dynasty and because they are mainly found in the former Pallava territories. Certain Bull type lead coins with blank reverse dug up at the Kāñcī excavations are also assigned to the Pallavas. However, it is noteworthy that the Bull-type coins depicting a Ship on the reverse have a great resemblance with the Ship-type coins of the Śātavāhanas. The 'Ship' emblem may indicate that the Pallavas had maritime trade from the ports of the Coromandel coast. The Bull device was adopted also on the later Pāṇḍya and Cola coinages.

To Class II belong the die-struck gold, base silver and copper issues having 'a maned Lion within a Circle' on the obverse and various symbols like Vase flanked by Lamp-stands, *Cakra*, Bow, Fish, Umbrella, Mountain, Horse, etc., on the reverse. These coins, which are generally well-executed, are of three

sizes—large, medium and small. Those in silver and copper are of large fabric, while those in gold are medium and small. As already noted, the attribution of these coins to the Pallavas has been disputed by Rama Rao and others who are inclined to ascribe them to the Viṣṇukundins on the ground that the Pallava emblem was the Bull, not the Lion. Vidya Prakash on the other hand points out that Lion was also a favourite motif of the Pallavas, if not their *lāñchana*, as is shown by their monuments, so that there is no reason to doubt that the Pallavas used it on their coins as well. It is, however, possible that the Viṣṇukundins also issued these coins in imitation of the Pallava issues.

(ii) *Pāṇḍyas*. The Pāṇḍya coins show a large number of varieties. They are mainly in copper and rarely in gold. Definitely attributable Pāṇḍya silver coins are not known; but it is held that certain types of silver punch-marked coins circulated in the Pāṇḍya country. A majority of the Pāṇḍya coins however, bear 'Fish', the dynastic symbol of the Pāṇḍyas. Their issues fall into three main periods: the earliest about the third and fourth centuries A. D., the intermediate struck in the fourth and fifth centuries, and the later ones which were minted from the seventh to the tenth century.

The gold coins of the Pāṇḍyas were probably later issues. They are known in the denominations of the *Pagoda* and *Fanam*. They bear on the obverse the figure of two Fishes along with other symbols and on the reverse a legend in Nāgarī, Kannaḍa or Telugu characters.

The Pāṇḍya copper coins fall into two classes: (1) squarish die-struck pieces of earlier times, and (2) round coins of the intermediate and later periods.

The earliest squarish coins, which come from the Madurai, Ramnad* and Tirunelveli Districts as well as from Ceylon, are of various sizes, weighing from 30 to 144 grains. These coins, which usually have 'a triangular Diagram or stylised Fish' on

* [Now Ramanathapuram.—Ed.]

the reverse, are known in at least four varieties according to the obverse motifs which are 'Elephant', 'Bull', 'Tree-in-railing' and 'Fish'. In all cases, however, the central device, i.e. the Elephant, Bull, Tree-in-railing, or Fish, is surrounded by a number of symbols like *Cakra*, Trident, Six-peaked Hill, *Svastika* and Lamp. These coins are assigned to a period between 200 B. C. and 300 A. D.

Round copper coins attributed to the Pāṇdyas are of various types. The earliest of them were perhaps those ill-executed tiny pieces which bear symbols like *Svastika*, Trident, etc., on the obverse and what looks like a Standing figure, Floral design or Three peaked Hill on the reverse. Next come those small coins bearing a standing figure on one side and the figure of a fighter on the other. They were followed by a long series of coins known in light and heavy weights and bearing a Standing figure on the obverse and a Seated figure on the reverse. The latest were coins bearing 'common' titular designations of the Pāṇḍya kings and, as such, cannot be attributed to any particular sovereign.

(iii) *Ceras*. Cera coins, which cannot be assigned to any date earlier than the ninth century, come from two areas : Koṅgudeśa (i.e. Salem and Coimbatore Districts) and Kerala on the western coast. Certain gold coins with the devices of 'Elephant' and 'Scroll', which are otherwise known as *Gajapati Pagodas*, are generally attributed to Koṅgudeśa and, according to Rapson, belonged to the period before c. 1090 A.D., since they were apparently copied by Harṣadeva of Kashmir. Moraes, however, assigns these coins to the Vijayanagara king Mallikārjuna.*

Some copper coins generally weighing between 50 and 55 grains and having mainly 'a Cross with the two lower ends joined by a line' on the obverse and 'a Bow with other designs' on the reverse are attributed to the Ceras, specially because of the occurrence of the Bow which was the dynastic emblem of

* [See above, pp. 69 and 79, notes.—Ed.]

the Ceras. It is noteworthy that 'Villavan', which was the name of an early Cera king, means 'Bow-man' in old Tamil.

Some silver coins weighing from 33.8 to 36.3 grains and bearing two-line legends along with certain devices on both sides are assigned to the Cera kings. While the clearly written Nāgarī legend on the reverse reads *Śrī-Virakeralasya*, the curious writing on the obverse, which appears to be a local variety of Nāgarī, is not easy to read. N. Lakshminarayan Rao however reads the obverse legend as *Śrī-Gaṇḍaraṅkuśasya*. The attribution of these coins is not certain since more than one Kerala king bore the name Vira-Kerala. It is, however, possible, as suggested by Lakshminarayan Rao, that Virakeralavarman, the Venāḍu ruler (1127 A. D.), who shook off the yoke of his Cola overlords, issued these coins to commemorate his independence.

(iv) *Colas*. The Cola coins did not start before the ninth century A.D. They are assignable to two different periods: one before 1022 A.D. (i.e. before Rājarāja-cola)* and the other after that date. Coins of the first period bear on the obverse the Cola emblem of 'Tiger' in the centre flanked by 'Fish' (the Pāṇḍya emblem) and 'Bow' (the Cera emblem) with legends in Nāgarī characters. Coins of the second period depict on the obverse 'a crude Human Figure in regal robe' and on the reverse an unidentifiable 'Seated Figure', probably the goddess as seen on the coins of the Kalacuri king Gāṅgeyadeva.

Cola coins are known in gold, silver, copper and brass, though specimens of the last two metals form the majority. Names of the Cola coin denominations are rather peculiar. The more common gold coins were known as *Māḍai* and had a weight ranging from 72 to 80 grains, being thus heavier than the *Gadyāṇa* of 58-60 grains. Half-*Māḍai* struck by each of the Cola kings before 1070 A.D. were called *Kāṣu-māḍai*. From the time of Kulottuṅga I several other types of *Māḍai* were issued by the Cola feudatories. The *Māḍais* which were

* [Rājarāja ruled from 985 to 1016 A.D.—Ed.]

gold coins of standard fineness betray progressive debasement of metal.

Silver *Kāśus* were started by Rājarāja I and continued to be issued by Rājendra, Uttama-cola, Gaṅgaikoṇḍa-cola** and Kulottuṅga-cola. Coins of pure silver weigh from 61 to 62.5 grains, while those of impure silver have the weight ranging from 46 to 62.6 grains.

Kāśus and other denominations in copper were issued by Cola kings from the time of Rājarāja I. Coins weighing roughly from 40 to 60 grains were most probably intended for *Kāśu*, those from 26 to 37 grains for half-*Kāśu* and the others from 13 to 16 grains for quarter-*Kāśu*.

Tiger was the dynastic emblem of the Colas. The occurrence of the Pāṇḍyan emblem 'Fish' and the Cera emblem 'Bow' along with the title *Madurāntaka*, adopted by Uttama-cola, indicates the subordination of the Pāṇḍya and Cera kingdoms to the Colas. Later on these devices became conventional on Cola coins as on the issues of Kulottuṅga I.

The coins of Rājarāja do not generally bear the dynastic emblem 'Tiger', but have instead a standing Human figure on the obverse. A base silver coin of Rājarāja is however known, the obverse of which depicts a Seated Tiger along with a Human figure and other symbols, while the reverse has the Cola, Pāṇḍya and Cera emblems, viz. the Tiger, Fish and Bow respectively.

The copper *Kāśu* of the Standing Figure type of Rājarāja is very common in the Madras area, and this is characterised as the 'Ceylon-man type'. The type however did not originate with a Ceylonese king, but was introduced by Rājarāja after his conquest of that island and was continued by his successors. The devices of these coins, viz. the 'Standing King' and the 'Seated Goddess', although crudely designed, remind us of

** [*Madurāntaka-Uttama* and *Gaṅgaikoṇḍa* were titles of Rājendra, son of Rājarāja. *Madurāntaka-Uttama* was also the name of two predecessors of Rājarāja.—Ed.]

similar, but superbly executed, figures seen on the gold issues of the Gupta monarchs of Northern India.

On a few varieties of the Standing Man type, the Seated figure on the reverse is replaced by a standing or seated Bull, a standing Boar or a standing Elephant. The Bull reverse coins were issued by Kulottuṅga and his successors and were meant for circulation in Veṅgi and Tamil territories. The Boar device was introduced by Rājarāja after his conquest of the Eastern Cālukyas. The Elephant type coins were most probably issued for use in the Kerala region. Some coins of Rājarāja are found with Vaiṣṇavite emblems like *Viṣṇupada* and the *Muralidhara* figure of Kṛṣṇa, etc., which show that, himself a Śaiva, Rājarāja was tolerant towards other religions.

The coins of his successor Rājendra, who adopted the title *Gaṅgaikoṇḍa-cola* after his conquest of the Gaṅgas of Mysore, show the same devices. No coins of the next few kings are known. To Kulottuṅga who came after them are attributed coins with the Boar device and the legend *Colanārāyaṇa*. There are some other unattributable coins with the device of the Standing Figure. Coins of the successors of Kulottuṅga are not known. The commonest of Cola issues are the copper *Kāśus* of Rājarāja of the 'Standing Figure' type. Gold and silver coins of the Colas are rare.*

*General References. 1. W. Elliot, *Coins of Southern India*, 1866; 2. E. J. Rapson, *Indian Coins*, 1897; 3. V. A. Smith, *Catalogue of Coins in the Indian Museum, Calcutta*, Vol. I, 1906; 4. E. J. Rapson, [*British Museum*] *Catalogue of the Coins of the Andhra Dynasty, etc.*, 1908. 5. C. J. Brown, *The Coins of India*, 1922. 6. T. Desikachari, *South Indian Coins*, 1933; 7. J. Allan, [*British Museum*] *Catalogue of the Coins of Ancient India*, 1936; 8. R. E. Mortimer Wheeler (ed.), *Ancient India*, No. 4, 1947-48; 9. D. C. Sircar, 'Alleged Coins of the Mahiṣa Kings', *Ep. Ind.*, Vol. XXXV, 1963, pp. 69-78; 10-11. C. H. Biddulph, *Coins of the Pāṇḍyas*, 1966; *Coins of the Colas*, 1968; 12. Vidya Prakash, *Coinage of South India*, 1968; 13. *Journal of the Numismatic Society of India* volumes.

[For No. 9, see also Sircar, *Studies in Indian Coins*, Chapter VI, pp. 126-38. For many thousands of punch-marked silver coins discovered in South India, see Gupta's Bibliography, *JNSI*, Vol. XVII, App., pp. 15 ff. —Ed.].

V

NEGAMA AND CITY COINS

Jai Prakash Singh, Banaras Hindu University

The so-called *Negama* coins are reported from Taxila and Kauśāmbī. The coins from Taxila are known more widely than those from Kauśāmbī. The coins from Kauśāmbī¹ are also fewer in number than those from Taxila and are less varied.

The *Negama* coins from Taxila were found from the ruins of that city represented by the Bhir mound, Sirkap, and Sirsukh near Rawalpindi in West Pakistan. Most of the coins attributed to Taxila are surface finds and not found in excavations in a stratified context in appreciable numbers.² But the uninscribed copper coins from the place are both stray finds and discovered in the course of excavations. This copper coinage forms a homogenous group, distinct from other groups of copper coins of ancient India, such as those of Ujjain. Their similarity in style and the limited number of symbols and single types suggest that they do not cover a great period of time.³ The coinage is dated 'late in the third century B. C. when Taxila was under Maurya governors, and ending with the Greek conquest before the middle of the second century'.⁴

The early indigenous coins of Taxila are classified in two groups by Allan, viz. inscribed and uninscribed.⁵ He has discussed the uninscribed coins after the inscribed ones. But this should not be taken to mean that the inscribed coins were struck earlier than the uninscribed ones. The

1 *JNSI*, Vol. XXIV, p. 23 ; Vol. XXVIII, Part II, pp. 109-10.

2 See Marshall's *Guide*.

3 Allan, *BMC (AI)*, p. cxxxix.

4 *Loc. cit.*

5 *Ibid.*, p. cxxv.

uninscribed local coinage seems to have preceded the minting of inscribed coinage nearly all over Northern India.

The inscribed coinage of Taxila consists of those bearing the legends *negama*, *pañcanekame* and *hidujasame*.⁶ This category may also include the *Vaṭasvaka* coins of a doubtful attribution. The coins of the *Negama* series are often taken to be issued by guilds of merchants. Writing about the *pañcanekame* coins, Allan suggested the names like Rālimasa, Dojaka, Antakatakā, Hirannasame, Dosanasa and Vaṭasvaka to be 'names of districts whose local authorities issued coins in the country of Taxila with some system of co-ordination from a central authority'.⁷ This observation about the monetary aspect of these pieces was based on references to them as 'mercantile money token issued by traders'⁸ or 'trade token' or 'coin of commerce'.⁹

Later writers accepted the monetary nature of these coins, but took them to be the issues of guilds without possibly any State control.¹⁰ Notable among such scholars is D. C. Sircar who has suggested on the basis of certain passages from the work of Buddhagoṣa that 'all punch-marked coins were not issued by the State, that some of them were certainly issued by guilds and silversmiths as Smith suggested, and that such coins were in circulation side by side with those issued by the States'.¹¹ This statement, however, is more applicable to private minting of punch-marked coins. Sircar uses the city and *Negama*

6 [*Hiraññasame* = *Hiraṇyāśramah*.—Ed.]

7 *BMC* (AI), p. cxxx.

8 Bühler, *Indian Studies*, III, 2nd ed., Strassburg, 1898, p. 49.

9 Cunningham, *ASR*, Vol. XIV, p. 20.

10 The theory of the private minting of punch-marked coins was advanced by Smith, *IMC*, p. 133. S. K. Chakraborty admits State-minting of these coins, but at the same time maintains that private bankers also issued them (*Anc. Ind. Num.*, pp. 129-30). The theory that these coins were issued by the State is supported by Spooner (*ASI*, AR, 1905-06, p. 153), Bhandarkar (*Carm. Lect.*, 1921, pp. 98-99), Walsh (*MAS*, No. 19). See, however, J. N. Banerjea, in *Comp. Hist. Ind.*, Vol. II, p. 177.

11 *JNSI*, Vol. XXIII, p. 298. See also *Stud. Ind. Coins*, p. 102.

coins to support his view and writing about them says that they were 'issued by local bodies pertaining to the places in question, and the same is the case with similar coins bearing the word *negama*...¹² We are not concerned with the problem of private minting of puch-marked coins here. Sircar's 'local bodies' responsible for minting the city coins, however, cannot be identified with the *Negama* bodies that issued them or with any other known private bodies. But if we suppose that the city coins are the issues of the official administration of the city concerned, then they cannot be regarded as privately minted coins.

K. D. Bajpai follows the line suggested by Sircar about this matter and says, 'that the guilds or corporations of traders were empowered to issue coins is attested by the *Negama* coins from Taxila...Some Taxila coins bear the legend *pañcanekame* meaning probably that they were issues of a joint body of five *nigamas* or of a guild called *Pañcanigama*. This would indicate that, in the 3rd-2nd centuries B. C., there existed several guilds of traders who were authorised to issue coins bearing their particular names.'¹³ Bajpai also supports his view by referring to the coins bearing the legends *Gadhikanam*¹⁴ and *Kasabikanam*, both from Kauśĩmbĩ, and states further, 'that more than one guild of the same town used to issue such coins is borne out by the varieties in these coins regarding fabric, symbols and inscriptions'.¹⁵

Bajpai assumes too much on the basis of these coins. The mere existence of the pieces cannot be taken to prove that corporate bodies of traders issued coins to facilitate exchange of goods. The slight changes that determine varieties of particular groups of those coins do not indicate that they were struck by 'more than one guild' of the same town.

S. Bandyopadhyay writing about the *Gadhikanam* coins from

12 *Ibid.*, p. 301.

13 *Ibid.*, Vol. XXV, Part I, p. 18.

14 *Ibid.*, pp. 19-20 ; cf. also Vol. XXVIII, Part I, p. 46.

15 *Ibid.*, Vol. XXV, Part I, p. 20.

Kauśāmbī states that Bajpai's suggestion about the nature of the coin is 'more probable as it shows (i) that sometimes the traders' guilds issued coins—a suggestion hitherto based only on the coins bearing the legend *negama* (Sanskrit *naigama*)... (ii) that some ancient Indian coins were issued by the private agencies with or without the permission of the Government, (iii) that all ancient Indian coins were not State issues, and (iv) that the evidence of the *Visuddhimagga* of Buddhaghoṣa is supported by the actual finds of the coins of the private agencies'.¹⁶

Sircar on the basis of Buddhaghoṣa's evidence suggests the existence of coins (1) made of bits of wood and pieces of palmyra leaves on which figures were cut in and (2) those made of a quantity of lac or gum with the impression of figures', and thinks that 'it is doubtful whether the state issued coins of such flimsy material'.¹⁷ A coin called Pannika, mentioned in the *Vyavahārabhāṣya* (III. 267) belongs to the same category. An inscription from Nagarjunikonda refers to a guild called *Panika-seni* or *Pārṇika-śreṇi*.¹⁸ It was possibly a *śreṇi* of growers or sellers of leaves, probably betel leaves. "Though it is not sure which coins are actually referred to by Pannika, if this is accepted that it stands for the coin issued by the *Panika-seni*, then it may probably be suggested that the coin in question refers to the coins of the Gandhikas."¹⁹

The doubtful nature of the known *Negama* coins can be ascertained by comparing them with the definitely known State coins of both Taxila and Kauśāmbī.

The early inscribed coins of Taxila may not be placed much earlier than its first occupation by the Indo-Greeks. That the inscribed coins of Taxila were preceded by the uninscribed coinage of the locality, as all over Northern India, is beyond doubt. The chronological proximity of the inscribed *Negama*

16 *Ibid.*, Vol. XXVIII, Part II, pp. 155-56.

17 *Ibid.*, XXIII, pp. 300-01; cf. also Vol. XIII, p. 183.

18 *Ep. Ind.*, Vol. XXXV, p. 5.

19 *JNSI*, Vol. XXVIII, Part II, p. 156.

pieces with the Indo-Greeks is suggested by the *Hidujasame* pieces of Agathocles. This shows that the *Negama* issues were struck either before the Indo-Greek occupation of Taxila or during the early years of their rule. The *Hindujasame* pieces are the latest of the *Negama* series of Taxila and indicate that they were probably not coins. For had they been coins for circulation as official currency, Agathocles may have used this legend on some of his coins of the Indian type. Agathocles' use of *Hidujasame* shows that the coins of the *Negama* series were not actual coins.

The inscribed pieces of Taxila are totally different from the uninscribed coins of the city. Their inscriptions are different from other contemporary or near contemporary inscribed local coinage. Some *Negama* coins are without any symbols, some contain a single symbol whereas others contain several of them. But the symbol groups of the *Negama* coins are not in conformity with those of the Taxilian uninscribed coins.²⁰ Besides, the *Negama* coins are so few that they cannot be taken to have been circulated as an official currency of either Taxila or Kauśāmbī. These coins, unlike the uninscribed coins of Taxila, have not been found in hoards.²¹ The inscribed pieces, like the uninscribed coins of Taxila, do not seem to have travelled also.²² These arguments, we feel, indicate the non-monetary nature of the so-called *Negama* coins.²³

20 Some symbols, however, are common to both the inscribed and the uninscribed coins from Taxila ; but their symbol-groups are different. See my paper in *Seminar Papers on the Local Coins of Northern India*, p. 21.

21 Allan's varieties *a*, *d*, *h* and *i* of the uninscribed pieces were found by Cunningham in one pot in the ruins of Taxila with the *Vaṭasvaka* coins and coins of Pantaleon and Agathocles of the Taxila fabric; cf. *BMC* (AI), p. cxxxv.

22 The uninscribed coins of Taxila are also reported from Maheshwar (*The Excavations at Maheshwar and Navdatoli*, pp. 72-73), Ujjain (*JNSI*, Vol. X, p. 38), and Rajgir (*Seminar Papers on the Local Coins*, p. 19).

23 [We are inclined to disagree with this view. Even shells and bits of metal passed as coins in India till recent times. Many series of coins (e. g. the Śātavāhana silver issues) have been discovered in small numbers.—Ed.]

The non-monetary nature of the *Negama* and *Paincanekame* coins is further indicated by the *Gadhikanam* pieces from Kauśāmbī. It seems that these tokens were issued by the guilds concerned to be used either by their members or employees. The majority of the early Indian indigenous inscribed coins are State currency and indirectly prove the non-monetary nature of the said guild-tokens.

It is said that seals in ancient times were used as passports as well as objects of authentication of documents, etc.,²⁴ by the kings, guilds and individuals, etc. Such seals both with and without inscriptions are known from several sites. Seals bearing the names of *nigama*,²⁵ etc., are also known. Seals have also been found from Taxila, but not the *nigama* seals. We are not sure if it can be suggested that the *Negama*, etc., coins of Taxila served not only the purpose of passports, but also that of authentication in matters connected with the guilds that issued them. Whatever be the real nature of the *Negama* coins from Taxila and Kauśāmbī, it seems certain that they were not coins. And hence they cannot be taken to support the theory of private coinage in ancient India.

As regards the coins of flimsy materials, it should be kept in mind that they were not coins but primitive money. Primitive money is a stage of economic development leading to metallic money. But there are instances of primitive money existing side by side with fully developed coinages. Ancient India was no exception to this rule. The so-called coins of bits of wood, bamboo and palmyra leaves, lac and gum come in this group of money. The Pannika or leaf coins is also of the same category. The leaves—betel or others—may have been used as a common denominator in the *Panika-seni* or merchants dealing in leaves. The use of bits of wood, etc., and a quantity of lac or gum and leaves is comparable with the monetary uses of bitter almonds as small change in the 16th-17th century India

24 K. K. Thaplyal in the *Itihāsa-Cayanikā* (Sampurnanand Felicitation Volume), pp. 159 ff.

25 K. K. Thaplyal, in *JNSI*, Vol. XXX, pp. 133 ff.

and reported by foreign travellers.²⁶ Incidentally, betel-nuts and betel-leaves are said to have served as one of the media of exchange in the Pelew Islands.²⁷

Primitive money is different from coined money, and as such the two should be discussed in their proper context. Hence these units of value should not be taken to support the private minting of coins in ancient India.²⁸

Coins are assigned to cities because they contain the name of the city or locality supposed to be the place of their origin. Such coins, though found in small numbers, are known from many ancient city sites. Coins with the names of the following cities are known—Eraṇ, Kauśāmbī, Ujjayinī, Jyeṣṭhapura, Māhiṣmatī, Bhagilā, Tripurī, Vārāṇasī and Kurara. Besides, some coins with the legends bearing *Udehaki*, *Uṣabhe*, *Vaṭasvaka* and *Ajudhe* are also often connected with the pieces of this series.

Two coins in the name of Eraṇ were known to Allan;²⁹ but some have been subsequently published.³⁰ The Ujjayinī coins assigned to the first half of the second century B.C. are according to Allan probably the local issues of the time of the Maurya governors.³¹ Only two Kauśāmbī coins were known to Allan;³² but later a few more were published.³³ Coins of Jyeṣṭhapura³⁴ have a blank reverse. Altekar³⁵ took thme to

26 Cf. *The Book of Duarte Barbosa* (Hakluyt Society, London, 1918, Series II, Vol. XLIV), p. 156.

27 Augustin Kracmer, *Palau (Ergebnisse der Siidsee-Expedition, II. Ethnographie. B. Mikronesien, Vol. III, Part III* (Hamburg, 1926), p. 160.

28 [The author should have discussed the vital point as to what authority issued such 'primitive money' in Buddhaghoṣa's age, i.e. the 5th century A. D.—Ed.]

29 *BMC* (AI), pp. xci-xcii.

30 Cf. *JNSI*, Vol. XXV, p. 20.

31 *BMC* (AI), p. cxlv.

32 *Ibid.*, pp. xcviii-ix.

33 *JNSI*, Vol. XXIV, pp. 20, note 1; pp. 139-40; Vol. XXV, Part I, pp. 20-21.

34 *Ibid.*, Vol. XIV, pp. 5-8.

35 *Loc. cit.*

be 'tokens or passports' or the 'impression in bronze of its city seal'.

The coins published by Allan³⁶ and T. N. Ramchandran³⁷ were attributed to Māhiṣmatī by P. L. Gupta.³⁸ Later H. V. Trivedi³⁹ also published a coin of the city of Māhiṣmatī. He suggested that these pieces were struck by the city state of Māhiṣmatī.

S. L. Katare⁴⁰ writing about the coins of the city of Bhagilā refers to the coins of another city called Kurara and states that the city states rose to power sometime after the death of Aśoka. Writing about a Tripurī coin,⁴¹ Katare⁴² states that Tripurī also emerged as an independent republic after Aśoka together with other cities. All the four known Tripurī coins have a plain reverse.

The coins of Vārāṇasī indicate two varieties. One of these contains the name of the city only ; but the other contains the last two letters of the name of its issuer, ...*taśa*. However, there is nothing to support the identification of this king with 'some Kāṇva ruler'.⁴³ At the most only this can be said that the Vārāṇasī coins were issued by some local ruler.

Among the city coins of a rather doubtful attribution, I have referred to the pieces bearing the legends *Udehaki*, *Uṣabhe*, *Vaṭasvaka* and *Ajudhe*. Two Udehaki coins are known.⁴⁴ It is not certain whether Udehaki is a place or tribe name. S. L. Katare⁴⁵ takes them to be the coins of the city state of Udehaki. The other coin of Udehaki bears, in addition,

36 *BMC* (AI), p. 279.

37 *JNSI*, Vol. XIII, p. 74, No. 1.

38 *Ibid.*, Vol. XV, pp. 70 ff.

39 *Ibid.*, Vol. XVII, Part II, pp. 94-96.

40 *Ibid.*, Vol. XIV, pp. 9-14. The Kurara coins bear the legend *Kurarāya*. [The name of the place is then Kurarā.—Ed.]

41 See *BMC* (AI), pp. cxlf., 239, for the Tripurī coins.

42 *JNSI*, Vol. XIII, pp. 41 ff.

43 *Ibid.*, Vol. XII, Part II, pp. 134-35.

44 *BMC* (AI), p. cxli.

45 *JNSI*, Vol. XIII, Part I, pp. 41 ff.

Suyamitasa which shows that Sūryamitra was the king of the place or tribe. These, however, seem to be more tribal than city coins. The only known gold coin bearing the legend *Uṣabhe* in Kharoṣṭhī and *TAYPOC* in Greek⁴⁶ is from Puṣkalāvatī and is different from other coins bearing the names of cities. Coins bearing the legend *Vaṭasvaka* were found from Taxila with other local coins of the region. It is taken to be a place name connected with the Aśvakas. And this place was situated in the neighbourhood of Taxila near enough to be in close commercial relations with it.⁴⁷ The coins bearing the legend *Ajudhe* are in the Allahabad Museum. Their reverse is obliterated. They are assigned to the early second century B. C. Their attribution to Ayodhyā, however, seems uncertain.⁴⁸ Some other coins also have been at times wrongly mentioned as city coins.⁴⁹

The above-mentioned coins of the cities belong to different periods. It is almost certain that they were not struck by private bodies. It is difficult to take them as the official currency of the city states concerned issued to circulate as coins. Coins bearing the names of all the said cities are rare and are known only by a few specimens. Had they been issued to circulate as coins, they may have been found in larger numbers at least in some cases. In all probability, these pieces were some sort of identity tokens. This is confirmed by the Jyeṣṭhapura and Tripurī pieces which have a plain reverse. And these tokens were issued by the king of the city or his representatives responsible for the administration of the city. It is

46 Rapson, *JRAS*, 1905, pp. 786-87.

47 *BMC* (AI), pp. cxlvi-cxlvii.

48 *JNSI*, Vol. XXVIII, Part II, p. 210.

49 S. L. Katare has wrongly mentioned the coins bearing the legends *Kaviṣiye nagara-devata*, *Pakhalavadi-devada*, *Majhimikaya Sibi-janapadasa* and *Yaudheyanaṁ Bahudhāṇake* as coins issued by cities. These coins were issued in the names of the city deities—one of them by Eucratides, and the others by the Śibi and Yaudheya tribes. For Katare's view, see *JNSI*, Vol. XIII, Part I, pp. 40-45. [Madhyamikā and Bahudhānyaka are places and not deities.—Ed.]

also confirmed by the Vārāṇasī coin which contains part of its issuer's name. One Udehaki coin also gives the name of its issuer in *Suyamitasa* ; probably Udehaki coins are not city issues. Another Sūryamitra's name is connected on his coins with the place name Sudavapa. A coin of yet another king contains the legend *Sudavapa Dhruvamitasa*. Another coin of Dhruvamitra omits the name of Sudavapa.⁵⁰ These coins lead us to think that the city coins were issued either by their local rulers or their governors. They were probably to be used by certain important persons or officers of the city as identity tokens.

The passages from the works of Buddhaghosa in fact have nothing in them to indicate private minting of coins in his time.* These passages refer to the punch-marked coins. It is clear from the passages that the symbols on them had a definite meaning. It is not unlikely that the punch-marked coins were being unofficially manufactured and put into circulation during the period of Buddhaghosa. But we are not certain if Buddhaghosa's statements can be applied to the *Negama* and city tokens also. The said tokens were not in circulation like the punch-marked coins in Buddhaghosa's period.

Thus on the basis of Buddhaghosa's evidence it is very difficult to prove the monetary nature of the *Negama* and city tokens.

50 *Excavations at Rairh*, pp. 66-68.

* [We do not subscribe to this view.—Ed.]

VI

A NEW COIN TYPE OF ŚRĪ-ŚĀTAKARṆĪ

S. B. Deo, Nagpur University

An altogether new type of coin of Śrī-Śātakarṇī has come to light from Paunī, Bhaṇḍārā District, Maharashtra State. The coin was in the possession of a local fisherman and was purchased by the author of these lines in January, 1970.

The coin was reported to have been found in one of the fields near the river Vaingāṅgā which flows along the eastern flank of the township of Paunī. It is in a fairly good state of preservation though the edges are slightly fissured.

The details of the coin are as follows :

Metal : Potin ; Shape : Rectangular ; 1.7×1.6 cm, with one corner bevelled ; Weight : 6 grammes ; Thickness : 1.7 mm.

Obverse : A circle in relief with a pellet within, on the periphery of the circle are alternated taurine and umbrella or arrow-head motifs, three each ; legend overhead—...*ñō si ri sa.....ṇī*

Reverse : Possibly tree in railing, only the upper portion of the tree visible ; tree with three thick crescentic leaves ; pellet above one of the leaves ; stem of tree emerges from one of the corners of the coin ; rest effaced.

The coins so far assigned to the Śātakarṇīs have been reported from Western India, Northern Deccan, Western and Eastern Malwa and Andhra Pradesh. So far no coins of Śrī-Śātakarṇī have been reported from the region of Vidarbha.¹

The material of the above-mentioned coins is mostly lead and copper. The few potin specimens have been assigned to Śātakarṇī II. Even the potin coins of Śātakarṇī II have on their obverse animal figures like that of an Elephant or Lion. The present coin has no animal figure on it on the obverse. The large number of Śātakarṇī coins recovered in the Nevāsā

1 Rama Rao, *JNSI*, Vol. XX, App. to Part I.

excavations fail to provide any parallel to the present coin. Moreover most of the Nevāsā coins are of lead and not of potin.²

So far as the region of Vidarbha is concerned, the Tarhālā hoard has given us coins mostly of the later Śātavāhanas. The excavations at Kaundinyapura did yield a rectangular copper coin with both the eight-armed symbol with umbrellas or arrows and the Ujjain symbol with *Svastikas* in between the arms.³ However, our coin has no Ujjain symbol, has a legend, and the circle has six adjuncts in the form of three taurine symbols and three arrows, arranged alternately. Thus from the known evidence also the present coin is unique in the Vidarbha region.

The shapes of the Śātakarṇi coins known so far are oval, circular, square and rectangular. The Paunī coin is almost a square, but has one corner bevelled.

The palaeography is interesting. *Sa* has a thick short vertical and the lower loop is thick and curved inward. The upper loop of *Si* is thin and somewhat straight. *Ra* is thin and straight. The letters *ta* and *ka* are completely effaced. The *akṣara ṇi* is thick and stumpy with the upper loop slightly angular. On these considerations, it may not be illogical to assign the coin to about the 1st century B.C.

Apart from being a new type, the present coin possibly provides further evidence of the rule of the early Śātavāhanas over Vidarbha. So far, Śātakarṇi coins have been reported mostly from Northern Maharashtra and Malwa. It is also reported that coins of Śātakarṇi I have been recovered from the excavations at Paunī. If so, then the present coin further attests to Vidarbha being ruled by the early Śātavāhanas as well. And the ruler could be no other than Śātakarṇi I, 'the eastern boundaries of whose dominions abutted on the western frontier of the kingdom of Kalinga under Khāravela' and who 'seems to have exercised sway over wide regions of the Upper Deccan including probably a portion of Central and Western India'.⁴

² Sankalia et al., *From History to Prehistory at Nevasa*, pp. 176-80.

³ M. G. Dikshit, *Kaundinyapura*, p. 137, Pl. XL, A. 7.

⁴ D. C. Sircar, in *The Age of Imperial Unity*, pp. 198-99.

VII

SILVER COINAGE OF THE ŚĀTAVĀHANAS

Ajay Mitra Shastri, Nagpur University

The Śātavāhanas issued their coins mostly in base metals like copper, lead and potin. In a later period of their history they also started a coinage in white metal, obviously in imitation of the silver issues of their adversaries, the Śaka Kṣatrapas of Malwa, Gujarat and Kathiawad.* However, as compared to the coins in cheap metals, their silver issues known so far are rather scarce. Till now only about a dozen silver coins have been reported.¹ But there is no doubt that these represent only a small fraction of the silver currency introduced by the Śātavāhanas in their dominions. However, curious as it might appear, like the beginnings of the Śātavāhana currency in general, the initial period of the silver coinage of the Śātavāhanas is also shrouded in obscurity.

The solution of this problem depends, to a large extent, on the correct interpretation and attribution of a unique silver coin published by A. S. Altekar about quarter of a century

* [Kathiawar is now included in the Gujarat State.—Ed.]

1 Of these, one belongs to Vāsiṣṭhīputra Puṣumāvi (Trivedi, *JNSI*, Vol. XIV, pp. 1-3, Pl. I. 1-2), four to Vāsiṣṭhīputra Śātakarṇi (Altekar, *ibid.*, Vol. XI, pp. 59-63, Pl. II. 5-6 ; Dinkar Rao, *ibid.*, Vol. XXI, pp. 9-12, Pl. I. 4 ; Altekar, *ibid.*, pp. 13-17 ; Sircar, *Ep. Ind.*, Vol. XXXV, pp. 247-52, Pls. facing pp. 250-51 ; S. Ramayya, *JNSI*, Vol. XXVII, pp. 32-36, Pl. II. 6 ; *ibid.*, Vol. XXX, pp. 74-79 ; another silver coin of this king is reported to be in the cabinet of S. M. Shukla of Bombay, *ibid.*, Vol. XXI, p. 107), and six to Gautamīputra Śri-Yajña Śātakarṇi (Rapson, *BMC*, pp. lxxxix-xc, 45, Pl. VII ; Bhandarkar, *ASI, AR*, 1913-14, p. 208, Pl. LXV. 22 ; Katare, *JNSI*, Vol. XII, pp. 126-32 ; Vol. XIII, pp. 46-51 ; Altekar, *ibid.*, Vol. XII, pp. 132-33 ; Vol. XIII, pp. 51-52 ; R. V. Ranade, *ibid.*, Vol. XXVI, pp. 98-99, Pl. I. 8). Another silver coin in two pieces doubtfully attributed to Gautamīputra Śātakarṇi has been published by P. L. Gupta, *ibid.*, Vol. XXI, pp. 107-09, Pl. VI. 1-1A. Still another silver coin is the one under discussion.

ago.² Weighing 30 grains and measuring .7 inches in diameter, it bears a six-arched hill, with a dot in each of its arches, on a platform, below a wavy line and the Brāhmī legend commencing from the top of the hill—*raño Gotamī*... on the obverse, and the Ujjayinī symbol with a pellet in each of its orbs on the reverse.^{2a}

Although the incompleteness of the legend rendered the identification of the issuer difficult,³ from such other indications as were available, Altekar attributed this coin to Gautamīputra Śrī-Yajña Śātakarṇi.⁴ His view was mainly based on Rapson's observation that the change from the three-arched *caitya* (hill) to the six-arched one took place during the reign of Gautamīputra Yajña Śātakarṇi⁵ and on the close resemblance between this coin and some lead coins of the Āndhradeśa fabric attributed by Rapson to this king.⁶ He surmised that Śrī-Yajña Śātakarṇi probably signalised his reconquest of the portions of Gujarat and Malwa not only by issuing silver portrait coins, but also by striking inscribed silver coins of the Āndhradeśa type.⁷ Another reason which must have prompted Altekar's suggestion probably was that, at that time, silver coins of only Yajña Śātakarṇi were known. Differing from Altekar, P. J. Chinmulgund proposed to identify the issuer of this coin with Gautamīputra Śātakarṇi mainly on the ground that, while counter-striking the silver coins of Nahapāna, Gautamīputra

2 *JNSI*, Vol. VIII, pp. 111-13.

2a The photograph of the obverse seems to be defective. The peaks of the hill appear to be laid sideways and not vertically as usual, and the inscription is not clear. At p. 112, crescented six-arched hill is described, by oversight, as on the reverse.

3 There were two Gautamīputras in the family, viz., Gautamīputra Śātakarṇi and Gutamīputra Yajña Śātakarṇi.

4 It must be said in fairness to Altekar that he considered, but rejected the possibility of this coin being issued by Gautamīputra Śātakarṇi. Vide *JNSI*, Vol. VIII, pp. 111-12.

5 *BMC*, pp. lxxii-lxxiii.

6 *Ibid.*, pp. 36-37, Pl. VI, Nos. 139-46.

7 *JNSI*, Vol. VIII, p. 112.

Śātakarṇi used both the three-arched and six-arched varieties of the hill device with or without dots in the arches and with or without crescent at the top.⁸ He also indicated the remote possibility of the coin in question being actually an issue of Nahapāna restruck by Gautamīputra Śātakarṇi.⁹ In his comments on Chinmulgund's paper¹⁰ and elsewhere¹¹ Altekar reiterated his view which seems to have been by and large accepted by numismatists.

However, since the publication of the above coin over two decades earlier, much new material has come to light rendering a reappraisal of the whole question imperative. Silver coins of Vāsiṣṭhīputra Pulumāvi and Vāsiṣṭhīputra Śātakarṇi which were not known then have been published in this interval. And since the problem has a great bearing on the beginning and history of the Śātavāhana silver coins, it is discussed here afresh in the light of the new evidence.

Firstly, the six-peaked hill was the main argument in favour of assigning this coin to Gautamīputra Śrī-Yajña Śātakarṇi. Even barring the devices employed by Gautamīputra Śātakarṇi in restamping Nahapāna's silver coins, there is enough evidence to prove that the device was quite popular with the predecessors of Yajña Śātakarṇi. The Madras Government Museum has some lead coins of Gautamīputra Śātakarṇi¹² and one coin of Vāsiṣṭhīputra Pulumāvi¹³ bearing the six-peaked hill on the obverse and the Ujjayinī symbol on the reverse. Some lead coins of this type with the legend *raño Gotamiputasa*

8 *Ibid.*, Vol. IX, pp. 93-94 ; Vol. X, pp. 22-23. For the Jogalthambhi hoard containing Nahapāna's restruck coins, see *JBBRAS*, Vol. XXII, pp. 223-44. For counter-striking devices, see *JNSI*, Vol. XVII (ii), pp. 97-99.

9 *Ibid.*, Vol. IX, p. 94.

10 *Ibid.*, pp. 95-96 ; Vol. X, p. 24.

11 *Ibid.*, Vol. XIV, p. 3.

12 M. Rama Rao, *Select Śātavāhana Coins in the Government Museum, Madras* (*Bulletin of the Madras Government Museum, New Series, General Section*, Vol. III, No. 2, Madras, 1959), pp. 2-3, 15, Nos. 14-22.

13 *Ibid.*, pp. 3, 15, No. 23.

siri-Śātakarṇisa were published by Rapson who, however, attributed them to Śrī-Yajña Śātakarṇi even though they do not bear the king's personal name Yajña.¹⁴ These coins actually appear to have been issued by Gautamīputra Śātakarṇi.¹⁵ Moreover, we also have silver issues of Vāsiṣṭhīputra Pulumāvi¹⁶ and Vāsiṣṭhīputra Śātakarṇi,¹⁷ which show on the reverse crescented six-peaked hill as one of the major devices, the other being the Ujjayinī symbol. It would thus follow that the six-peaked hill symbol has no bearing on the attribution of this coin as it was used at least by four Śātavāhana rulers, viz., Gautamīputra Śātakarṇi, Vāsiṣṭhīputra Pulumāvi, Vāsiṣṭhīputra Śātakarṇi and Śrī-Yajña Śātakarṇi. The only inference one can draw from the occurrence of this symbol is that it could not have been issued by any king before Gautamīputra Śātakarṇi who appears to have introduced it for the first time on the coins of his dynasty.

Let us now institute a comparative study of the silver coins of the Śātavāhanas about whose attribution there is no room for doubt and see if they furnish any indication about the attribution of the present coin. Three Śātavāhana rulers are definitely known to have issued silver coins. They are Vāsiṣṭhīputra Pulumāvi, Vāsiṣṭhīputra Śātakarṇi and Gautamīputra Śrī-Yajña Śātakarṇi. The silver issues of all these kings are almost uniform as regards their obverse and reverse devices. The obverse shows the bust of the king to right while the reverse bears the Ujjayinī symbol on left and six-peaked hill surmounted by a crescent with a zigzag line below on right as the principal symbols. They can be distinguished from one another as issues of different ruling chiefs only by referring to legends which give the names and titles of the issuing kings. This type

14 *BMC*, pp. 36-37. [*Yajña* has been read on one specimen.—Ed.]

15 Cf. Rama Rao, *op. cit.*, pp. 2-3.

16 *JNSI*, Vol. XIV, pp. 1-3, Pl. I. 1-2.

17 *Ibid.*, Vol. XI, pp. 59-63 ; Pl. II. 5-6 ; Vol. XXI, pp. 9-12, 13-17, Pl. I. 4-4a ; *Ep. Ind.*, Vol. XXXV, pp. 247-52, Pls. facing pp. 250-51 ; *JNSI*, Vol. XXVII, pp. 32-36, Pl. II. 6 ; Vol. XXX, pp. 74-79, Pl. IX. 15.

was evidently introduced by Vāsiṣṭhīputra Pulumāvi¹⁸ and adhered to by his successors without a single exception. The fact that except the dubious coin under consideration no silver coin of any other type is known to have been issued by any Śātavāhana ruler shows that it had become well-established as the sole type for the silver coins of the dynasty. Under these circumstances, it was not possible for Gautamīputra Śrī-Yājña Śātakarṇi to revert to the type employed by his great ancestor for counter-striking the silver coins of Nahapāna, and issue the present coin. Moreover, as is well known, coinage in India was local in character and generally different types were chosen for coins in different metals. For instance, not a single portrait coin of the Śātavāhanas is known in any metal other than silver. It follows from the above that the present coin can, by no stretch of imagination, be attributed to Gautamīputra Śrī-Yājña Śātakarṇi. It could have, therefore, been struck by the only other Gautamīputra of the dynasty, i.e., Gautamīputra Śātakarṇi.

A comparison of the legend on the present coin on the one hand and those on the normal Śātavāhana silver issues on the other also points in the same direction. The latter bear legends on both sides, that on the reverse showing definite Dravidian elements in certain respects.¹⁹ The coin under study, which, like the silver pieces of Nahapāna counter-struck by Gautamīputra Śātakarṇi, bears legend only on the obverse, has,

18 P. L. Gupta published a silver portrait coin broken into two pieces and tentatively attributed it to Gautamīputra Śātakarṇi. Vide *JNSI*, Vol. XXI, pp. 107-09, Pl. VI. 1-1A. But the reading of the legend is, as admitted by Gupta himself, very doubtful and renders the suggested attribution uncertain. In case, however, this coin was actually issued by Gautamīputra Śātakarṇi, the credit of initiating the bust type silver coins also will have to be accorded to him.

19 For discussion on this point, see references in the first footnote of this paper. The reverse legend on Vāsiṣṭhīputra Śātakarṇi's coins was correctly read and interpreted by D. C. Sircar in *Ep. Ind.*, Vol. XXXV, pp. 247 ff.; *Studies in Indian Coins*, Delhi, 1968, pp. 107 ff.

therefore, got to be placed in the period prior to the introduction of the double-legend silver coins.

The above conclusion is also supported by a study of the circumstances under which the silver coinage of the Śātavāhanas originated. Many Śātavāhana rulers prior to Gautamīputra Śātakarṇi are known to have issued a variety of coins. But all these coins are in base metals like lead, copper and potin. Not a single silver issue of the pre-Gautamīputra period is known. Gautamīputra Śātakarṇi also, like his predecessors, contented himself, for a major part of his reign, by striking cheap metals. It was only towards the close of his reign that circumstances forced him to think seriously of issuing coins in white metal. His victory over the Kṣaharāta Mahākṣatrapa Nahapāna necessitated the issue of a silver coinage to meet the requirements of the newly acquired provinces which were accustomed to the use of such coins. The conqueror tried to meet this requirement at first by restamping the coins of his vanquished enemy with his own devices and legend. But as he had no silver types of his own, he used one of the types of his lead coins, which he had himself partly introduced, for this purpose, i.e., three- or six-arched hill with or without dots in the arches, sometimes surmounted by crescent, on the obverse, and the Ujjain symbol with or without pellets in the orbs on the reverse. Such coins have been found in large numbers in the famous Jogalthambhi hoard. These coins also served the additional purpose of announcing his victory over his foe. These restruck pieces, however, could not meet the requirements of the newly annexed provinces for ever, and Gautamīputra Śātakarṇi, therefore, decided to issue his own silver coinage. And for this purpose he utilised the same type with which he had earlier counter-struck the coins of Nahapāna. The coin under reference is a specimen of this independent silver currency. As Gautamīputra started this coinage late in his reign, it was issued in small numbers; hence the paucity of such coins. Most of the northern provinces acquired by him were lost to the Śātavāhanas during the reign of his successor, Vāsiṣṭhi-

putra Pulumāvi, as a result of the energetic and expansionist military policy pursued by the Kārdamaka Mahākṣatrapas Caṣṭana and Rudradāman I. However, towards the end of his reign he seems to have reconquered some of these provinces and thought of issuing silver currency for these reoccupied areas. Probably the experience of the independent silver coinage introduced by his father was not very happy as the regions for which it was meant were used to portrait coins in silver and so Vāsiṣṭīputra Pulumāvi decided to issue bust coins. But while he gave his bust on the obverse of these coins, he took full care to accommodate both the obverse and reverse devices of the silver currency introduced by his great father on the reverse of these coins. These issues, though differing from the Kārdamaka ones as regards the reverse devices, were apparently well received by the people and became established as the normal type of the Śātavāhana silver coinage. History repeated itself over two centuries later when the Gupta emperor Candragupta II Vikramāditya extinguished the Kārdamaka Śaka rule from Malwa and Gujarat and minted his own silver currency to replace the Śaka Kṣatrapa issues. He, too, retained the obverse type of the vanquished enemy supplanting the reverse devices by his own.

To sum up, it may be concluded that the credit of initiating an independent Śātavāhana silver currency is undoubtedly due to the great Gautamīputra Śātakarṇi. The newly introduced type was continued by his successors on the reverse of their silver coins while the obverse was occupied by the royal bust.

VIII

MANER HOARD OF INDIGENOUS COINS*

Sarjug Prasad Singh, Centre of Advanced Study
in AIHC, Calcutta University

The village of Maner lies 15 kilometers to the west of Patna. The place is of great historical and archaeological interest. That it was an important place in ancient times is indicated by its extensive ruins scattered over an area of about one and half miles. The old name of the place occurs in a copper-plate inscription¹ of the Gāhaḍavāla king Govindacandra of Kanauj and also in two other inscriptions² of king Jayaccandra of the same dynasty.

The present hoard containing 31 coins, 8 stone beads, a stone seal bearing the zodiacal sign of taurus and a flower-bud, and an ivory stamp bearing the mark of the sun were acquired by the present writer from the possession of an old farmer of the said village some time ago. Of the coin hoard, 13 are broken and have little numismatic value. The rest of them include 3 silver punch-marked, 4 copper punch-marked, 10 uninscribed cast copper and one single-type copper coins.

Of the silver punch-marked coins, two belong to the broader and thinner varieties weighing 3.368 grammes (or 52 grains) and 3.466 grammes (or 53.3 grains) and measuring .6" × .5" and .7" × .5" respectively. They belong to the same class ;

* [The revised copy of the paper was received in August, 1970.—Ed.]

1 The inscription dated V. S. 1183–1126 A.D. was discovered at Maner itself. It records the grant of the villages of Guṇāve and Pāḍali in the Mañiāri-pattalā (cf. *JBORS*, Vol. II, pp. 441 ff. ; Bhandarkar's List, No. 214).

2 Another inscription discovered near Varanasi (V. S. 1232–1175 A.D.) mentions Ma[na]ra-pattalā (cf. *JPASB*, 1922, pp. 81 ff. ; *Ind. Ant.*, Vol. XVIII, p. 129). A second inscription of the same king again refers to Mañiāri-pāṭaka in Jaru[ttha]-pattalā (cf. *Ind. Ant.*, Vol. XVIII, p. 142).

the grouping and position of the obverse symbols, however, show that the marks on each of the coins were impressed by different sets of punches. The weights of the coins are interesting and it seems that they were originally struck to the traditional standard of a *Kārṣāpaṇa* weighing 32 *Ratis* or 58.56 grains.

One silver punch-marked coin (No. 1) bears, on the obverse, the impression of the sun, a variety of the six-armed symbol, three-peaked hill with crescent, elephant and a hare or dog with a pup in its mouth, and a minute variety of the three-peaked hill with crescent and triskelis on the reverse.

Another coin of the same class (No. 2) exhibits the marks of the sun, six-armed symbol, traces of three-peaked hill with crescent, elephant and an indistinct mark on the obverse, and traces of three-peaked hill with crescent and triskelis on the reverse.

A third coin of the class (No. 3) is a thick piece weighing 32 grains and measuring .4" × .5". Its obverse symbols cannot be properly identified. It bears the marks of the sun, six-armed symbol, hook-like symbol, traces of another symbol and caduceus on the obverse, and the last-named symbol on the reverse.

So far as the copper punch-marked coins are concerned, they all belong to the large and thick variety. Two of them (Nos. 4 and 5) are of the same group (Group A). No. 4 is a square piece (.8" square) weighing 14.061 grammes (217 grains) showing that it was possibly a coin of $1\frac{1}{2}$ *Paṇa* standard. It contains the marks of the sun on both the sides while the other symbols are blurred.

No. 5 is badly corroded and defaced. Its weight, 14.320 grammes (221 grains), is little over $1\frac{1}{2}$ *Paṇas*. It bears the impressions of the sun, and faint traces of a variety of three-peaked hill with crescent and traces of other marks on the obverse, and the sun and a W-shaped symbol and another indistinct mark on the reverse. It may be pointed out that, in Bihar, such heavy copper punch-marked coins have been

found at places like Basarh,³ Rajgir,⁴ Kumrahar,⁵ Madhipura⁶ and Sonapur⁷ forming a class of the local issues of Magadha.

The remaining two copper punch-marked coins (Nos. 6-7) resemble in shape the silver bent-bar coins of Taxila. They are sufficiently corroded and it is not possible to identify all the symbols. They weigh 15.358 grammes (277 grains) and 15.553 grammes (280 grains) respectively and both the coins seem to be specimens of the double *Paṇa*.

No. 6 exhibits, on the convex side the impression of the sun and W- and U-shaped marks, while the marks on the concave side are blurred. Another coin (No. 7) of this type is much worn out, the marks on both the sides being indistinct.

It may be pointed out in this connection that a similar copper coin of the bent-bar type measuring 1.2" × .5", weighing 85 grains and bearing faint traces of two circular symbols on the convex side with the other symbols blurred, was discovered in the excavation from Period II (c. 150 B. C. to 100 A. D.) at Kumrahar.⁸

It may be pointed out that the symbols on the copper punch-marked coins of the Maner hoard are different from those on the silver punch-marked coins. Unlike the latter, the marks on the former seem to have been impressed not in a group, but separately by the individual punches. This is proved by the uneven and haphazard execution of the symbols,

3 Krishna Deva and Mishra, *Vaisali Excavations*, 1950, p. 58 *Indian Archaeology*, 1959-60, p. 11.

4 A fairly large number of copper punch-marked coins were found at Rajgir and are now preserved in the Indian Museum, Calcutta. Cf. Register of Presentation to the Archaeological Section, Indian Museum, No. P. M. 72 to P. M. 85
c 14230 to c 14243.

5 Altekar and Mishra, *Rep. Kum. Excav.*, 1951-55, p. 86.

6 *ASIAR*, 1925-26, p. 154.

7 The coins from Sonapur will be published soon by the present author.

8 Altekar and Mishra, *op. cit.*, p. 89.

some of the marks on the same face being deeply punched into the metal with the others faint. Again some of the symbols are overlapping.

All the ten cast copper coins of the Maner hoard belong to the same type showing elephant, triangle-headed banner, *svastika* and taurus on the obverse and tree-in-railing hollow-cross, three-peaked hill with crescent and taurus on the reverse. The coins are all rectangular in shape and correspond to variety *k* of the British Museum coins catalogued by Allan.⁹ Their weights vary between 3.498 grammes (54 grains) and 3.758 grammes (58 grains), though two of the coins weigh 3.239 grammes (49.5 grains) and 3.304 grammes (51 grains). The reason of the large variation in the weights of these coins seems to be the indigenous method of casting from earthen moulds and also due to the long duration of circulation and corroded condition of the coins. The discovery of the coins of this series from Taxila,¹⁰ Ujjain,¹¹ Rupar,¹² Kausambi,¹³ Rajghat,¹⁴ Mathura,¹⁵ Ahichchhatra,¹⁶ Hastinapur,¹⁷ Sankisa,¹⁸ Besnagar,¹⁹ Bairat,²⁰ Tripuri,²¹ Maheshwar,²² Navdatoli,²³

9 *BMC(AI)*, p. 89, Pl. XI, Nos. 11-15.

10 *Ancient India*, No. 9, pp. 116 ff.

11 N. R. Banerjee, *The Excavations at Ujjain*, 1959, pp. 74 ff. ; *JNSI*, Vol. XVI, Pt. II, p. 177.

12 *Ancient India*, No. 9, p. 125.

13 *ASR*, Vol. X, p. 4 ; *JNSI*, Vol. XII, p. 82 ; G. R. Sharma, *The Excavations at Kausambi*, 1957-58, pp. 19-20, 80 ff.

14 *Indian Archaeology*, 1960-61, p. 37 ; 1961-62, p. 56.

15 *Ibid.*, 1954-55, p. 15.^a

16 *Ancient India*, No. 1, p. 39.

17 *Indian Archaeology*, 1954-55, p. 14.

18 *ASR*, Vol. XI, p. 25.

19 *ASIAR*, 1913-14, pp. 210 ff.

20 *ASR*, Vol. XXII, pp. 114 ff.

21 M. G. Dikshit, *Tripuri*, 1952, pp. 121 ff.

22 H. D. Sankalia, B. Subba Rao and S. B. Deo, *The Excavations at Maheshwar and Navdatoli*, 1952-53, pp. 16-26, 66 ff.

23 *Loc. cit.*

Kumrahar,²⁴ Basarh,²⁵ Rajgir,²⁶ Nandangarh,²⁷ Sonapur Chakramadas,²⁸ Pinagra,²⁹ Madhuri,³⁰ Vijayapura,³¹ Chanaki,³² Tamluk,³³ Harinarayanpur,³⁴ Bangarh,³⁵ Chandraketugarh,³⁶ and many other ancient sites in India shows that they had a wide circulation in the ancient Indian market.

Another interesting piece from Maner is a single type copper coin bearing two separate marks of three dots arranged in a triangular fashion, on the obverse, with blank reverse. It weighs 2.29 grammes (35 grains). The special feature of the coin is the punching and the fact that this symbol is not found on the coins of the other series. Coins of this type have been found at Rajgir³⁷ (Patna District) and Sonapur (Gaya District) in Bihar and at no other place. They were probably the local and private issues of Magadha.

It may be noted that the Maner hoard was not discovered from a datable stratum and therefore we are not sure of its date. But the discovery of the silver and copper punch-marked coins and cast copper coins in the archaeological

24 *JNSI*, Vol. XII, Pt. II, pp. 144 ff.; Altekar and Mishra, *op. cit.*, pp. 19, 92 ff.

25 *Indian Archaeology*, 1960-62, p. 5; Krishna Deva and Mishra, *op. cit.*, pp. 6, 58 ff.; *Indian Archaeology*, 1959-60, p. 16.

26 *JNSI*, Vol. I, p. 5; C. R. Choudhury, *CEICAM*, pp. 27, 30, 36.

27 *ASIAR*, 1935-36, p. 64, Pl. XXIII.

28 In 1950 and subsequently in 1959-60, some excavations were carried out by the K. P. Jayaswal Research Institute, Patna, at the village of Chakramadas and some cast copper coins were dug out.

29 *Indian Archaeology*, 1954-55, p. 61.

30 Register of Presentation to the Archaeological Section, Indian Museum, Calcutta, No. $\frac{6510}{c 2375}$; cf. Smith, *IMC*, Vol. I, Pl. XXII. 16.

31 Three cast copper coins discovered at the village of Vijayapura (Patna District) have been recently acquired by the present author.

32 *Prācyavidyā-taraṅgiṇī*, ed. D. C. Sircar, p. 108.

33 *Ancient India*, No. 9, p. 155.

34 C. R. Choudhury, *op. cit.*, pp. 26 ff.

35 *Ibid.*, pp. 33, 38.

36 *Ibid.*, pp. 32 ff.

37 *JNSI*, Vol. I, Pl. I, Nos. 7-8.

excavations at various ancient sites in India shows that they were current during the NBP and post-NBP periods down to the Kuṣāṇa age, though a few were in circulation even in the Gupta period.³⁸ But no coin has so far been discovered from pre-NBP levels. The earliest limit of the circulation of these coins are problematical and we have no chronological data to arrange them in any order. No systematic attempt has so far been made to study and classify them in the light of archaeological excavations. Some numismatists wrongly classify the punch-marked coins (on the basis of size, shape, weight, fabric and grouping of the symbols) into two categories, i.e. local and Imperial. The coins of the local series are said to have been issued before the rise of the Magadhan empire between the 7th and 6th centuries B. C. Coins of the Golakhpur hoard³⁹ are regarded as the earliest of the local series and it has been argued that they were current in Magadha before the issue of the Imperial coinage.⁴⁰

The Imperial coinage of Magadha, again, has been classified into various periods and attributed to the Bimbisārian, Śaiśunāga, Nanda and Mauryan dynasties and also to the different monarchs,⁴¹ like Candragupta, Bindusāra, Aśoka and Daśaratha, though there is no evidence whatsoever to show that these instruments of exchange constituted a currency of standard and token coins issued and regulated by the Central authority.⁴² The classification of the punch-marked

38 A silver punch-marked coin and a cast copper coin were discovered in the excavation from Period IV (c. 300 to 450 A. D.) at Kumrahar. Cf. Altekar and Mishra, *op. cit.*, p. 86, Serial No. 1 ; p. 94, Serial No. 24.

39 *ASIAR*, 1917-18, p. 26 ; *JBORS*, Vol. V, p. 16.

40 *Chronology of the Punch-marked Coins*, ed. Narain and Gopal, p. 12.

41 Durga Prasad considered the coins of the Golakhpur hoard as belonging to the Śaiśunāga period (*JASB*, Vol. XXX, p. 58 ; *ibid.*, N.S., No. XLVII, pp. 51 ff.). R. K. Choudhury assigns the silver punch-marked coins found at Bahera (Darbhanga District) to the time of Daśaratha (cf. *JBRS*, Vol. XLIII, pp. 376 ff. ; Pls. III-IV. See also *NIA*, Vol. IV, 1941, pp. 1 ff. ; *JNSI*, Vol. XX, Pt. II, p. 114).

42 Rhys Davids, *JRAS*, 1901, p. 877.

coins into chronological order on the evidence of size, shape, weight, fabric and the grouping of the symbols is of doubtful historical value.

The contents of the Maner hoard show that it was a poor-man's collection and was buried at a date before the introduction of the inscribed currency in Bihar about the beginning of the Christian era, if not later still. The stone caskets, referred to earlier, were probably used for keeping ornaments, stone beads and coins.

The weights of the coins are interesting and show that various denominations were current in ancient Maner. Most of the coins correspond to the ancient weight system;⁴³ but the original weights of some of the worn out specimens cannot be determined.

43 For the ancient Indian weight system, see *JNSI*, Vol. XIV, pp. 128ff.; Vol. XV, pp. 136 ff.

IX

COIN DEVICES ON CLAY LUMPS

Kiran Kumar Thaplyal, Lucknow University

A large number of symbols and motifs are commonly expressed through the media of ancient Indian art-forms. The closest parallel to the coins in shape and size, legend and device, is provided by seals. The early indigenous coin devices on clay may be classed in two categories : (1) those that are partly similar, and (2) the more or less identical ones. While examples of the first type are innumerable, we also come across a few of the second. It is intended to present here the latter together with their coin-parallels obtained from various sites. These are detailed in the appendix and illustrated in the accompanying Plate.

About three decades back, Sri Krishna Deva made a study of the Indo-Greek and Gupta coin devices on the Rajghat clay lumps.¹ The Indo-Greek coin devices, in all probability, are suggestive of the trade-contacts between India and the West.² One of the possibilities in the case of the Gupta devices may be that they could have been tokens issued by the Imperial Guptas to acquaint people with their prowess (as revealed by tiger- or lion-slaying) as well as their artistic taste and talent like playing on the *vīṇā*. Early indigenous coin devices on clay lumps do not portray royal figures and, as such, could not have served the purpose suggested in the case of the Imperial Gupta devices.

Likely enough, these could have been tokens issued by minting authorities providing *bona fides* of the person possess-

1 K. Deva, 'Excavations at Rajghat', in *Annual Bibliography of Indian History and Archaeology*, Vol. III, 1940, pp. xli-li. ; 'Coin Devices on Rajghat Seals', in *JNSI*, Vol. III, pp. 73 ff.

2 Cf. *JNSI*, Vol. III, p. 77.

ing them, or else, were results of mint masters' testing of the coin-dies on clay lumps which somehow escaped destruction.³ We are, however, inclined to include another possibility. D. R. Bhandarkar⁴ long back showed that, according to the commentary on the *Vinayapiṭaka* by Buddhaghosa (5th century A. D.), the coins could be of copper, iron, *sāra* wood, the outside of bamboo or the palmyra leaf, lac or gum bearing *rūpas* and also of skin, fruits and seeds with or without *rūpa* marks. The testimony of the poet-saint Jñānadeva attests to the prevalence of leather money as late as the thirteenth century A. D.⁵ Rhys Davids took a lacquer model in the collection of Pearse as a possible example of the non-metallic type of coins mentioned by Buddhaghosa.⁶ Most of the non-metallic substances being perishable, their coins would have been lost beyond recovery. But if the coins were of such material as leather, wood or gum as stated by Buddhaghosa,⁷ they could very well have been fashioned out of clay, a substance which, in some respects, is more suited for this purpose than some other materials mentioned by that scholar. In our opinion, if any existing non-metallic substance bearing *rūpa*-marks has any claim of being taken as coins, these are also equally entitled to be classed in the same category.⁸

3 Incidentally, their find may also suggest the possibility of the existence of a mint in the neighbourhood of the findspot.

4 D. R. Bhandarkar, *Ancient Indian Numismatics*, Calcutta, 1921, pp. 140-41.

5 *Ibid.*, pp. 146-47.

6 *Ibid.*, pp. 145-46.

7 Jai Prakash Singh informs me that reference to clay as a medium of exchange in India is to be met with in Pramathanath Banerjea's book, *A Study of Indian Economics*, 2nd ed., London, 1915, pp. 167-68, and that clay money was prevalent in China, for which the author refers to Terrien de Lacouperie's *Catalogue of Chinese Coins from the 7th Century B.C. to A.D. 621, including the Series in the British Museum*, London, 1892, p. 424.

8 We are grateful to B.P. Sinha, A.K. Narain, G. R. Sharma and S.C. Kala, for facilities of study and photographs.

Appendix

Below are appended coin-parallels found to occur on the seals illustrated in the Plate.

- 1 Kauśāmbī. Dept. of Anc. Ind. History and Archaeology, Allahabad University. Hill, sun, moon and river symbols which are quite popular on early Indian coins.
- 2 Rājghāṭ. Bharat Kala Bhavan, Varanasi.
For a close parallel see the rev. of a *Pañcanekama* coin from Taxila (Allan, *CCAI*, Pl. XXXI. 11).
- 3 Sonpur (Dist. Gaya). Directorate of Museums and Archaeology, Bihar Govt., Patna.
Ujjain Symbol. For a close parallel, see *CCAI*, Pl. XXXVIII. 20 (Ujjayinī coin).
- 4 Rājghāṭ. Dept. of A. I. H. C. and Archaeology, B. H. U.
Ujjain symbol, exact parallel may be seen on the rev. of an Ujjayinī coin (*CCAI*, Pl. XXXVIII, 25).
- 5 Rājghāṭ. Bharat Kala Bhavan, Varanasi.
Ujjayinī symbol and a *Yūpa*—two of the symbols that occur on the coins of Dhanadeva of Ayodhyā (*CCAI*, Pl. XVIII. 1).
- 6 Rājghāṭ. Dept. of A. I. H. C. and Archaeology, B. H. U.
Yūpa in railing occurs on several ancient Indian coins together with other symbols.
- 7 Sonpur. Directorate of Archaeology and Museums, Bihar Govt., Patna. These symbols occur variously on ancient Indian coins.
- 8 Sonpur. Directorate of Archaeology and Museums, Bihar Govt., Patna. *Svastika*; close parallels are met with on the coins of Ayodhyā (*CCAI*, Pl. XVI. 7) and Taxila (*ibid.*, Pl. XXXV. 1).
- 9 Jhūsi. Allahabad Museum, Allahabad.
Svastika with a taurine symbol at the end of each of its arms. Exactly similar device occurs on the reverse of Ujjayinī coins (*CCAI*, Pl. XIX. 5, 6, 8 and 9).
- 10 Sonpur. Directorate of Archaeology and Museums, Bihar Govt., Patna.
The three symbols—sun, taurus and *Jayadhvaja*(?)—occur on several ancient Indian coins in different combinations.
- 11 Sonpur. Directorate of Archaeology and Museums, Bihar Govt., Patna. A near parallel to this symbol can be seen on an Eran coin (*CCAI*, Pl. XVIII. 9).

- 12 Rājghaṭ. Bharat Kala Bhavan, Varanasi.
These symbols (together with others) occur on uninscribed cast coins.
- 13 Rājghaṭ. Bharat Kala Bhavan, Varanasi.
These symbols occur on certain uninscribed cast coins of ancient India (*CCAI*, Pl. XXXII. 12, 13).
- 14 Sonpur. Directorate of Archaeology and Museums, Bihar Govt., Patna.
It occurs (as a lone reverse symbol) on certain Ayodhyā coins (*CCAI*, Pl. XVI. 8-10). Similar symbols are also found to occur on the *negama* coins from Taxila together with legends (*CCAI*, Pl. XXXI. 2, 3, 4).

X

SOME CURRENCY PROBLEMS OF ANCIENT AND EARLY MEDIAEVAL SOUTH INDIA

B. D. Chattopadhyaya, Calcutta

In the context of early mediaeval South India or, for that matter, of North India as well, any proposable model for analysing the systems of currency within the framework of even a limited space and time, cannot possibly restrict itself solely to a study of coins locally minted and with local dynastic affiliations. If an assessment of the total volume of currency circulating within a region in a given period of time is considered to be the starting point for such an analysis, relevant South Indian materials would indicate that, in all the known stages of its currency history, contemporary indigenous currency was supplemented, in some form or other, by other categories of coins, not always indigenous in origin. This paper aims, as a preliminary pointer, at citing relevant instances and at bringing out the theoretical implications, albeit select in nature, of some such currency situations.

For historical reasons, this introduction may conveniently start with the period of the Śātavāhanas or, for the sake of a broader geographical-chronological framework, that of the Śaka-Śātavāhanas. Despite minor and not too universal variations, Śātavāhana currency has the appearance of a facile uniformity with its emphasis, barring limited areas of Śātavāhana rule, on low-value coins of copper, lead and potin.¹—At

1 For a survey of the entire range of Śātavāhana numismatics, see E. J. Rapson, *Catalogue of the Coins of the Andhra Dynasty, the Western Kṣatrapas, the Traikūṭaka Dynasty and the 'Bodhi' Dynasty* (*A Catalogue of the Indian Coins of the British Museum*), London, 1967 reprint; also M. Rama Rao, *List of Published Śātavāhana Coins* (*Numismatic Notes and Monographs*, No. 6, Varanasi, 1958).

its depth, however, the organisation of currency in the Śātavāhana empire, which from the regular dynastic character of the coinage, seems to have been the outcome of a consistent currency policy on the part of the Śātavāhana state, may be shown to have faced, at least in certain areas, a major currency problem. In this period, as in others, the problem was posed by (1) the continuation of earlier forms of currency and (2) the presence, within South India in and also beyond the chronological horizon of Śātavāhana rule, of a huge volume of completely non-indigenous currency. The continued use of old currency in the Śātavāhana period is possibly first reflected in the reference to the *Kāhāpaṇas* in the Nanaghat inscription² of queen Nāganikā. Archaeological evidence relating to the continuity of old punch-marked coins and to the continued manufacture of such coins even in the post-Śātavāhana period is not entirely absent.³ Epigraphic evidence on the presence of a non-local currency in the Śaka-Śātavāhana territories is furnished by a Nasik inscription of the period of Nahapāna which shows an attempted value-adjustment between *Kārṣāpaṇa* and *Suvarṇa*,⁴ between local and non-local currency. Secondly, the presence of large quantities of Roman coins in different areas of South India is a known historical fact.⁵ It is often asserted

2 D. C. Sircar, *Select Inscriptions bearing on Indian History and Civilisation*, Vol. I, 2nd ed., Calcutta, 1965, pp. 194-95.

3 See P. L. Gupta, *Punch-marked Coins in the Andhra Pradesh Government Museum* (Andhra Pradesh Government Museum Series, No. 1), Hyderabad, 1960-61, pp. 34, 130; and *The Amaravati Hoard of Silver Punch-marked Coins* (Andhra Pradesh Government Museum Series, No. 6), Hyderabad, 1963, p. 144; and *Journal of the Bombay Branch of the Royal Asiatic Society*, New Series, XXVI, Pt. II (1951), pp. 214-18.

4 *Ep. Ind.*, Vol. VIII, p. 85.

5 For Roman coins found in South India, see *JRAS*, 1904, pp. 591-673; *Ancient India*, Archaeological Survey of India, No. 2, Appendix II, pp. 116-21; W. F. Grimes (ed.), *Aspects of Archaeology in Britain and Beyond—Essays presented to O. G. S. Crawford*, London, 1951, pp. 375-81; P. L. Gupta, *Roman Coins from Andhra Pradesh* (Andhra Pradesh Government Museum Series, No. 10), Hyderabad, 1965, pp. 41-45.

that an alien currency could not have been imported into South India for use as coins and 'as minting at that time was under state control, therefore, Government took serious note of all attempts of Roman traders of circulating their coins in Indian markets, which could affect the national economy'.⁶ Such contentions seem to ignore the logic of the currency situations in South India. Without referring to the 'deliberate importation' hypothesis of Warmington⁷ and without any attempt at working out the level of transactions at which Roman coins, deliberately imported or otherwise brought to India, functioned, it may safely be said that they served as useful stores of value, as did the indigenous coins. This is reflected in the reference to the *Suvarṇas* in the Nasik inscription⁸ cited above, which, although they may not be identical with Roman coins, definitely refer to a non-local currency. Secondly, Roman coins have been found along with punch-marked coins in a number of hoards,⁹ and thirdly, on a number of Roman silver coins from South Indian hoards appear, as shown by the study of P. L. Gupta,¹⁰ punches analogous to those on local punch-marked coins. All these should indicate that Roman coins in South India, some of which must be referable to the Śātavāhana period, were as much part of the total currency situation as indigenous coins, old or contemporary, were.

These brief references to certain well-known numismatic data are made to introduce a major currency problem in the early historical period, which seems to have remained unaltered throughout the other periods of South Indian currency history as well. They create an impression that even

6 JNSI, Vol. XXVI, p. 226.

7 E. H. Warmington, *The Commerce between the Roman Empire and India*, Cambridge, 1928. p. 274.

8 See note 4 above.

9 P. L. Gupta, *Roman Coins from Andhra Pradesh*, p. 43, No. 28 ; p. 44, No. 35.

10 *Ibid.*, p. 70.

in a period when currency policy originated from apparently sovereign authorities, the circulation of non-contemporary and non-indigenous currency must have posed a major problem of integration and, more specifically, of value adjustment. The continuity of an identical problem in the later centuries in different areas of South India may be assumed from references to the *Dināris*¹¹ and *Dināri-māsakas*¹² in the records of the the Ikṣvākus who coined only in lead,¹³ from the continued circulation of the Kṛṣṇarāja-rūpakas in the Badami-Cālukya period¹⁴ and from the references, by a number of Muhammadan writers, to the *Tatariya* or *Tahiriya Dirhams* and their value relationship with the locally manufactured coins in the kingdom of the Balharā.¹⁵

In the early mediaeval period, the problem seems to have assumed a more complex character with the emergence of what we may term as the new currency. Within a broad chronological framework, this refers, in Karnatak, Maharashtra and Goa, to the coins of the Kalyāṇa Cālukyas, the Kalacuris, different branches of the Kadamba family, the Śilāhāras, the Western Gaṅgas, the Hoysalas, the Yādavas, and the Ālupas ; in Andhra and Tamil Nadu, similarly, the representative coin series are those of the Eastern Cālukyas, the Colas, the Pāṇḍyas, the Telugu-Coḍas and other minor dynasties.¹⁶ This dynastic list itself, a study of the actual coins manufactured by them, and relevant examples where distribution-areas and circulation periods of certain types of coins may be ascertained mainly on

11 *Ep. Ind.*, Vol. XXXV, pp. 5, 7.

12 *Ibid.*, Vol. XX, p. 19.

13 See R. Subrahmanyam, *A Catalogue of the Ikṣvāku Coins in the Andhra Pradesh Government Museum* (Andhra Pradesh Government Museum Series, No. 5), Hyderabad, 1962.

14 *Ep. Ind.*, Vol. XXV, pp. 232-33.

15 J. Dowson (ed.), *The History of India as told by its own Historians* by H. M. Elliot, Vol. I, London, 1867, pp. 3-4, 13, 24-25.

16 The chronology of the coins of these dynasties has been discussed in detail by the present writer in his unpublished dissertation, *Coins and Currency Systems in Early South India, c. 225 A. D.-1300 A. D.*

the basis of epigraphic records, would reveal how more complexly than in the past the problem of value-adjustment introduced above was present in this period. It is obvious that the minting authority was somewhat diffused ; the circulation-areas of coins were not necessarily limited to the centres of their origin ; the length of the circulation period, on the analogy of earlier cases and on the evidence of contemporary epigraphic material, may be said to have been uncertain. A few relevant examples will bear these out. In a record of Tamil Nadu, we come across an extremely significant reference to the circulation of *Solīya-kāśus*, i.e. Cola coins, which from the context appear to have been copper coins, in the kingdom of the Pāṇḍyas.¹⁷ The simultaneous use of new and old coins is evident from frequent references to the *palam* (old) and *pudu* (new) coins in Tamil Nadu.¹⁸ And if we care to select any particular area to illustrate the point, the Krishna District in Andhra Pradesh around the middle of the 12th century would offer an ideal example : epigraphs refer to the circulation of at least five types of coins : *Uttamagaṇḍamāḍa*, *Kulottuṅgamāḍa*, *Rājarājamāḍa*, *Gandhavāraṇa-māḍa* and *Biruda-māḍa* in this area.¹⁹ As evidence of provenance indicating the apparently unrestricted circulation of coins beyond the areas of their origin may be cited the Karantak find of Cola silver coins²⁰ and the wide distribution area of different categories of gold and silver coins, now mostly in the Andhra Pradesh Government Museum.²¹ In a different way, analogous to the case of the Krishna District mentioned above, the find in the Nellore District of the

17 *Annual Report on South Indian Epigraphy*, 1914, No. 439 of 1913.

18 K. A. Nilakanta Sastri, *The Colas*, 2nd ed., Madras, 1955, p. 614.

19 Cf. *Annual Report on South Indian Epigraphy*, B171 and B175-76 of 1897 ; *ibid.*, 1898, A 208, A 212, A 233-34, A 236 ; *ibid.*, 1918, B 847-48, B 855 ; *South Indian Inscriptions*, Vol. X, No. 229.

20 *JNSI*, Vol. XXIV, pp. 183-86.

21 Cf. M. Rama Rao, *Select Gold and Silver Coins in the Andhra Pradesh Government Museum* (Andhra Pradesh Government Archaeological Series, No. 13), Hyderabad, 1963.

celebrated Kodur hoard with its numerous types and varieties,²² may indicate the concentration of the output of widely separated mints in areas of crucial commercial importance.

Secondly, a study in depth of the total currency picture cannot afford to ignore the possibility of the presence and use, in some form or other, of coins completely alien to the area, as in the past. Even if such terms as *Poruttha-dramma*, (variants—*Paurūthi-dramma*, *Pārūttha-dramma*²³ and *Hera-dramma*)²⁴ are considered to be of no special significance in this context, unmistakable evidence is provided, in the Western Deccan, of the presence of non-indigenous coins by the imitation of the Indo-Sassanian class of coins by the Śilāhāra king Cittarāja around the middle of the 11th century.²⁵ The actual presence of this category of coins in the Western Deccan is indicated by the Uruli (Poona) hoard.²⁶ In Tamil Nadu, such terms as *Īlakkāṣu* and *Īlakkaruṅgāṣu*, referring to Ceylon coins, are extremely familiar in the Districts of Tanjore, Madura, Ramnad, North Arcot, South Arcot, Tinnevely, etc.²⁷ Epigraphic reference to the gift of *Cinakkanakam*, in all probability identical with some class of Chinese coins, at a temple at Nagapattinam,²⁸ is also highly significant in this context. Hoard evidence on the presence of Chinese coins in Tamil Nadu is furnished by two finds, one at the village of Vikramam

22 *Government of Madras, Home Department (Miscellaneous), G. O. No. 1106*, 11th October, 1917, pp. 1-8.

23 *Ep. Ind.*, Vol. XXIII., p. 281; also *JNSI*, Vol. XXX, pp. 96-101.

24 *Epigraphia Carnatica*, Vol. VIII, Sorab 479.

25 *JRAS*, 1900, p. 118.

26 *JNSI*, Vol. VII, pp. 19-22.

27 *Annual Report on South Indian Epigraphy*, 1925, B 47; *ibid.*, 1916, p. 118; *ibid.*, 1936, B 196; *ibid.*, No. 554 of 1920; *Ep. Ind.*, Vol. XXVIII, p. 87; *South Indian Inscriptions*, Vol. III, pp. 239-42; *ibid.*, Vol. V, No. 720; etc. [The present names of the Districts are 'Thanjavur' for 'Tanjore', 'Madurai' for 'Madura' 'Ramanathapuram' for 'Ramnad' and 'Tirunelveli' for 'Tinnevely', in which *ta* is represented in one case by *t* and by *th* in another.—Ed.]

28 *Annual Report on Indian Epigraphy*, 1956-57, B. 166; also *JNSI*, Vol. XX, p. 13.

in the Pattukkottai Taluk, Tanjore District²⁹ and another at Thalikattai in the Mannargudi Taluk of the same District.³⁰

The situation outlined above necessarily involves an enquiry into the possibility of the existence of any standard criterion for fixing the value relationship between different categories of coins circulating, assuming that the instances cited are not isolated ones. On the authority of the Nasik inscription of the period of Nahapāna, already mentioned, the value relation between a gold and a silver coin in the early historical period is assumed to have been 1 : 35. For early mediaeval Tamil Nadu, K. A. Nilakanta Sastri seeks to work out, mainly on the strength of epigraphic material, the following pattern : *Kāṣu* = $\frac{1}{2}$ *Kaḷaṇḍu* = $\frac{1}{2}$ *Māḍai*.³¹ There is, however, nothing to warrant that any such fixed pattern of value relationship ever existed. While the cases cited by Nilakanta Sastri may be considered to prove his point, there are numerous others which do not. In his scheme, 1 *Kaḷaṇḍu* would be equal to 1 *Māḍai* ; but there are records which show 1 *Kaḷaṇḍu* to be equal to $\frac{8}{9}$ of a *Rājarājanmāḍai*³² or $\frac{4}{7}$ of a *Māḍai*.³³ The risk involved in working with general coin names enumerated in the epigraphs is that they had variable meanings and would not always refer to the same specific groups of coins. A study of actual coins, for example, would show that the *Māḍa* of *Rājarājamāḍa*³⁴ could not have been identical with the *Māḍa*

29 *Sino-Indian Studies*, Vol. I, Pt. I, pp. 60ff. ['Pattukkottai' and 'Thanjavur'.—Ed.]

30 *Ibid.*, Vol. IV, pp. 194-96.

31 Nilakanta Sastri, *op. cit.*, pp. 613-14 ; also p. 626, note 40.

32 *South Indian Inscriptions*, Vol. V, No. 520.

33 *Ibid.*, Vol. VII, No. 788.

34 The *Rājarājamāḍas* may have been identical with the gold coins of either Eastern Cālukya Rājarāja or Cola Rājarāja. The metrological standard represented by the coins of both seems to have been identical ; see C. H. Biddulph, *Coins of the Colas* (Numismatic Notes and Monographs, No. 13), Varanasi, 1968, pp. 40-41 ; T. B. Nayar, *The Dowlaishwaram Hoard of Eastern Cālukyan and Cola Coins* (Bulletin of the Madras Government Museum, New Series, General Section, Vol. IX, No. 2), Madras, 1966, pp. 17ff.

of *Bhujabalamāḍa*³⁵ either in weight or in metallic content. Secondly, even if such a theoretically fixed pattern existed, it is doubtful how far it actually worked ; if it did, it would have made unnecessary the varied assaying methods and standards, references to which abound in contemporary epigraphs. References, apparently to the value of both local and non-indigenous coins, in terms of contemporary standards,³⁶ raise legitimate doubts regarding the functioning of any rigid pattern which could be laid down officially to determine the value relationships between different categories of coins.

The discussion made so far must then reflect on the organisation of and control over currency in early and, more particularly, early mediaeval South India. In the early mediaeval period, the varied and fragmented tone of South Indian politics and perhaps the absence of any consistent currency needs seem to have hindered the growth of a vigorous currency policy which could ensure, at least in well-marked politico-cultural areas such as Tamil Nadu or Karnatak, the maintenance of an unadulterable currency situation with only locally manufactured coins in circulation and with a fixed pattern of value relationship between their different denominations. If such were the case, even the theoretically fixed ratio between *Gadyāṇa* or *Māḍa* on the one hand and *Paṇa* on the other would not have varied from 1 = 10³⁷ between 1 = 9 $\frac{3}{4}$ *Paṇas*³⁸ and 1 = 10 *Paṇas* and 1 *Hāga*,³⁹ as only two relevant instances would indicate ; nor would there be so many references, particularly

35 The *Bhujabalamāḍas*, at least some varieties of them, seem to be represented by the majority of the Kodur hoard coins. The weights of these coins are substantially different from those of Rājarāja—Eastern Cālukya or Cola. For the Kodur hoard, see note 22 above.

36 See A. Appadorai, *Economic Conditions in Southern India* (1000-1500 A. D.), Vol. II, Madras, 1936, pp. 721-24 ; Nilakanta Sastri, *op. cit.*, pp. 620-21 ; also *Annual Report on South Indian Epigraphy*, 1916, pp. 17-18 ; *ibid.*, 1920, No. B 680 ; *Ep. Ind.*, Vol. V, p. 106 ; etc.

37 Appadorai, *op. cit.*, p. 798.

38 *Annual Report on South Indian Epigraphy*, No. 386 of 1919.

39 *Epigraphia Carnatica*, Vol. XII, Chik. 2.

in the records of Tamil Nadu, to the evaluations or assessments of individual groups of coins, both local and foreign, in terms of existing standards. The impression regarding the absence of any rigid state control, as reflected in the coins of the feudatories, is also confirmed by references, although sporadic, to private moneyers as in some other areas of India. Relevant coin-names in this connection are *vyavahārika-śreṣṭhi-Gambhuvaka-dramma* which occurs in a record of the middle of the 10th century from Thanā⁴⁰ and *Baṇṭapaṇa* which occurs in a record of 1098 A. D. from Dharwar.⁴¹

Secondly, in a situation such as this, the area of monetary transactions, particularly in coins of high metallic value, in the economic life of the community must have been somewhat limited, and widespread speculations in exchange transactions must have been inevitable. As early as the 1st century A. D., the *Periplus of the Erythraean Sea* refers to such exchanges between indigenous and imported foreign currency on the western coast of India as a profitable undertaking.⁴² In the early mediaeval period, the references are more profuse. An indigenous record⁴³ of 1098 A. D. from the Bellary District refers to two persons who converted *Lokki-gadyāṇa* into *Mayūra-gadyāṇa*. Reference to money-changers and speculators occur repeatedly in the works of such mediaeval foreigners as Barbosa, Varthema, Ferishta and others.⁴⁴

To sum up the situation, more particularly of the early mediaeval period, we may quote from F. J. Richards who, of course, writes about a much later period. Of the situation in Salem around 1792 he says, "..... the various coins were arti-

40 *Ep. Ind.*, Vol. XXXII, p.60, line 38.

41 *South Indian Inscriptions*, Vol. XI, Pt. II, No. 145.

42 *The Periplus of the Erythraean Sea*, trans. W.H. Schoff, London, 1912, pp. 41-42.

43 *South Indian Inscriptions*, Vol. IX, Pt. I, No. 164.

44 T. V. Mahalingam, *Economic Life in the Vijayanagar Empire*, Madras, 1951, pp. 136-37 ; Appadorai, *op. cit.*, pp. 724-26.

cles of trade and their face value meant nothing. The value of any particular denomination of coin as a medium of exchange depended on what people would give for them, and this 'market value' fluctuated from time to time and varied from place to place. If Government were to insist on the revenue being paid in one particular kind of currency, the shroffs would be sure to buy up the available coins of that currency and by creating a 'corner'..... would inflict a great handicap on the public.⁴⁵

The situation in the early mediaeval period seems to have had at least some of the characteristics of what Richards describes. Incidentally, the question of the survival of barter to a late date and of the continued use of non-metallic currency may be referred to a more detailed analysis of the situation outlined above.*

45 F. J. Richards, *Salem* (Madras District Gazetteers), Vol. I, Pt. I, Madras, 1916, pp. 291-92.

* [As regards most of the conclusions reached by the author, cf. Sircar, *Studies in Indian Coins*, 1968, pp. 273 ff. ; also pp. 139 ff., 234-35, 281 ff., 289 ff., some of the discussions having appeared previously in *JNSI*, Vol. VII, 1945.—Ed.].

XI

EPIGRAPHIC ACCOUNTS OF THE NUMISMATIC HISTORY OF BENGAL

Bijan Behari De, Gauhati University

In our present state of knowledge, it is difficult to give a categorical answer to the question as to when minted metallic coins were first introduced in Bengal. But the paucity of data has been compensated by the frequent references to coins in use in Bengal, in the accounts of foreigners, indigenous works and epigraphical records. The Brāhmī inscription found at Mahasthan (Bogra District, East Pakistan),¹ palaeographically datable in the 3rd century B.C., refers to *Gaṇḍaka* and *Kākanika*. *Gaṇḍaka* has been explained as a small piece of coin of the value of four cowries,² while *Kākanika* has been referred to in the *Arthaśāstra* of Kauṭilya as a sub-multiple of the copper *Kārṣāpaṇa*.³ This bears evidence to the existence of a regular currency system in Bengal (at any rate in North Bengal) in the 3rd century B.C.

As to the actual specimens, the punch-marked and cast silver and copper coins have been found from different parts of Bengal, as in other parts of India. The wide distribution and the similarity of symbols have led scholars to suggest that they

1 Bhandarkar in *Ep. Ind.*, Vol. XXI, pp. 83-91 ff. ; Barua in *IHQ*, Vol. X, p. 57. [See above, p. 8.—Ed.]

2 *Gaṇḍaka*, *Gaṇḍā* or *Goṇḍā* (an Austric word ?). Regarding the relation between the terms *Gaṇḍā*, *Kāka* and *Kākinī*, it may be said that *Kāka* is now used in Bengal to indicate a denomination which is $\frac{1}{4}$ of a *Kaḍā* (i.e. cowrie) and $\frac{1}{8}$ of a *Gaṇḍā* and $\frac{1}{80}$ of a *Kākinī* or *Kāni*. Cf. D. C. Sircar in *IHQ*, Vol. XXVI, p. 313 ; also the *Lilāvaṇī* by Bhāskarācārya.

3 *Arthaśāstra*, trans. Shamasastri (3rd ed., Mysore, 1929), p. 95 ; for the currency scheme of Kauṭilya, cf. S. K. Chakraborty, *A Study of Ancient Indian Numismatics* (Mymensingh, 1931), p. 58 ; *History of Bengal*, Vol. I, ed. R. C. Majumdar, Dacca University, 1943, p. 664.

had a pan-Indian recognition. Of course, it may be observed that many of them were only for local use. These coins discovered in different parts of India, including Bengal, are believed to be imperial and local issues. If the Mahasthan epigraph has any bearing on the Mauryan rule in Bengal, it may be presumed that at least two types of coins, viz. *Gaṇḍaka* and *Kākanika*, were issued by the Mauryan imperial authority.

With the Kuṣāṇas, India found definitely a currency in gold. Kuṣāṇa coins in copper and gold have been found in various places of Bengal. *The Periplus of the Erythraean Sea*, of the 1st century A. D., refers to a type of gold coin called *Caltis*⁴ which was in circulation in the market town of Gange, presumably somewhere in Lower Bengal.⁵ The first literary reference to a gold coin actually in circulation in Bengal is thus found in the *Periplus*, and the first archaeological find of the gold coins in Bengal dates back to the age of the Kuṣāṇas—a period not too far in time from that of the *Periplus*. A suggestion has been put identifying the *Caltis* mentioned in the *Periplus* with the Kuṣāṇa gold coins.⁶

Coming to the Guptas, our evidences, both archaeological and literary, become more satisfactory. The epigraphic records of the Gupta period often refer to the gold coin called *Dināra*, evidently derived from the Roman *denarius aureus*, and the silver coin called *Rūpaka*,⁷ apparently as the issues of the Gupta

4 W. H. Schoff, *The Periplus of the Erythraean Sea* (London, 1912), p. 259. "The coin called *Caltis* is thought by Benfey to be the Sanskrit *Kalita*, 'numbered'. There was, however, a South Indian coin called *Kali* (sic—Elliot, *op. cit.*, 137), while Vincent, quoting Stuckins, mentions one of Bengal called *Kallais*. Wilford (*Asiatic Researches*, Vol. V, p. 269) preferred the refined gold called *Canden*" (*Hist. Beng.*, p. 664).

5 For Gange, see J. W. McCrindle; *Ancient India as described in Classical Literature* (London, 1877), p. 77; *Hist. Beng.*, pp. 11, 30, 42, 44, 661, 664.

6 *Hist. Beng.*, p. 45.

7 In the *Amarakoṣa* (III. 3. 14), *Dināra* is used as a synonym of *Niṣka*. Daṇḍin's *Daśakumāracarita* (ed. Narayan Acharya, Bombay, 1951) contains reference to *Dināra* as wealth (coin ? ; cf. Book IV).

monarchs. *Dināra* is often found in connection with the transactions concerning land ; for example, references may be made to the Damodarpur copper-plate inscriptions (of the years 124 and 128) of the time of Kumāragupta I, of the time of Budhagupta, and of year 224.⁸ The Kalaikuri (Bogra District) plate of the Gupta year 120⁹ and the Gunaighar (near Comilla) plate of the Gupta year 188 belonging to the reign of Vainyagupta¹⁰ also mention *Dināra* as a gold coin.

Sometimes the term *Hiraṇya* is used probably as a synonym for a gold coin (*Dināra*?). Thus *Hiraṇyam*=*upasaṅgīhya* is written for *Dināra-dvayam*=*upasaṅgīhya* in the Damodarpur plates.¹¹ According to Basak, it denotes merely 'value [in coin] and possibly not meaning any particular type of coin'.¹²

The Baigram copper plate of the Gupta year 128¹³ refers to *Dināra* and *Rūpaka* and gives an indirect clue to the relative value of the two. The epigraph records the purchase of land at the price of 6 *Dināras* for 3 *Kulyavāpas* and 8 *Rūpakas* for 2 *Droṇavāpas*. We are informed by the Paharpur plate that one *Kulyavāpa* was equal to eight *Droṇavāpas*. The price for three *Kulyavāpas* and two *Droṇavāpas*, at the rate of two *Dināras* per *Kulyavāpa*, amounted to six *Dināras* and eight *Rūpakas*. The price for two *Droṇavāpas* was thus eight *Rūpakas*. Therefore we find that a *Dināra* was equal to sixteen *Rūpakas*.

Dināra seems to be popular in Bengal also in the post-Gupta period as is suggested by the references in the Faridpur

8 See *Ep. Ind.*, Vol. XV, p. 129 ; Vol. XVII, p. 193 ; Vol. XV, pp. 134 f. ; Vol. XVII, p. 193 ; Vol. XV, p. 142.

9 Cf. *IHQ*, Vol. XIX, pp. 12 ff.

10 *Ibid.*, Vol. VI, pp. 45 ff.

11 See notes above.

12 *Hiraṇya* and *Dināra* are possibly used quantitatively and numerically respectively. [*Hiraṇya* here means 'price in cash'.—Ed.]

13 S. K. Saraswati, in *Varendra Research Society's Monograph*, No. 6 ; *Ep. Ind.*, Vol. XXI, p. 78.

plate of the time of Gopacandra (Regnal year 18).¹⁴ The Mallasarul plate referring to Vijayasena mentions *Dināra*¹⁵ which is also mentioned in the Faridpur plate of Dharmāditya.¹⁶

That a regular currency in gold existed in Bengal even in the 6th and 7th centuries A. D. is well known from epigraphic references. Coins of kings like Samācāradeva, Śaśāṅka, Jayanāga, Pṛthuvīra and Sudhanyāditya of Bengal, and some other coins issued in imitation of the Gupta gold coins, which were in vogue in ancient Bengal (found in various places of Bengal and sometimes outside its geographical boundaries), strengthen the theory.

The inscriptions of the Pāla period refer to the *Dramma* coins ; cf. the Bodhgaya inscription of the 16th regnal year of Dharmapāla.¹⁷ Coins in silver and copper containing the letters *Vigra* or *Śrīvigra* have been found. Some scholars take this *Vigra* to be a Vigrahapāla of the Pāla dynasty.¹⁸

There is proof of the existence of gold coinage in the Pāla age. *Hiraṇya* is found in many epigraphic records ; e. g. the Nalanda plate of Dharmapāla and the Nalanda plate of Devapāla,¹⁹ though it has been explained as 'value in coin' and not necessarily as a coin in gold.²⁰

14 *Ind. Ant.*, Vol. XXXIX (1910), p.204 ; D. C. Sircar, *Select Inscriptions bearing on Indian History and Civilization*, 1942, p. 358.

15 *Ep. Ind.*, Vol. XXII, pp. 159 ff. ; *Sel. Ins.*, pp. 359 ff.

16 *Sel. Ins.*, pp. 351, 352, 355.

17 *JASB*, N. S., Vol. IV, p. 102 ; A. K. Maitreya, *Gauḍalekhamālā* (Rajshahi, 1319 B. S.). According to the *Amarakoṣa* : 1 *Niṣka* = 1 *Dināra*, or 16 *Drammas* = 16 *Rūpakas*. According to the *Līlāvātī* (Śaka 1036 1114 A.D.) ; 20 *Kaḍās* = 1 *Kākinī* ; 4 *Kākinīs* = 1 *Paṇa* ; 16 *Paṇas* = 1 *Dramma* (silver) ; 16 *Drammas* = 1 *Niṣka*. [Bhāskara, author of the *Līlāvātī*, was born in 1114 A.D.—Ed.]

18 Cunningham, *Arch. Surv. Rep.*, Vol. XI, Pl. XLIII. 1, pp. 176-77 ; V. A. Smith, *Catalogue of Coins in the Indian Museum, Calcutta*, Vol. I, Pl. XXV. 10, p. 239 ; *Hist. Beng.*, p. 667 ; *MAI*, No. 55 ; *Indian Archaeology—A Review*, 1954-56 and 1959-60 ; *An. Rep. Arch. Surv. Ind.*, Vol. XXVI, p. 105 (K. N. Dikshit) [sic—Ed.] ; also Smith, *op. cit.*, p. 239.

19 *Ep. Ind.*, Vol. XXIII, p. 290 ; XXII, p. 318 ; V. R. S. *Monograph*, No. 1 ; also cf. Bangarh plate of Mahīpāla (*Gauḍalekhamālā*, p. 97.)

20 *Ep. Ind.*, Vol. XXIII, p. 150. ['Cash', above, p. 143, note 12.—Ed.]

Hiraṇya is also found in the epigraphic records of the Candras²¹ and Varmans.²² See also the Barrackpore plate of Vijayasena,²³ Naihati plate of Ballālasena,²⁴ etc. But it is the *Purāṇa* or *Kapardaka-purāṇa* which is often quoted in the inscriptions of the Sena period as a coin. See, e.g., Barrackpore plate of Vijayasena,²⁵ Naihati plate of Ballālasena,²⁶ Govindapur, Tarpandighi, Madhainagar, Sundarban, Saktipur and Anulia plates of Lakṣmaṇasena,²⁷ Madanpada plate of Viśvarūpasena²⁸ and even in the epigraphic records of the Deva dynasty.²⁹ *Purāṇa* is also found in the Bhaturiya inscription of Rājyapāla of the Pāla dynasty.³⁰ *Kapardaka* is the synonym for 'cowrie', i.e. *Kavaḍi* or *Buḍi* often mentioned in the *Caryā-padas* wherein we find that the ferry fare could be paid in cowries.³¹

In ancient India, a type of silver coin was known as *Purāṇa*. Bhandarkar says that *Kapardaka-purāṇa* was a silver coin shaped like a *Kapardaka* or cowrie.³² Regular references to the *Purāṇa* and *Kapardaka-purāṇa* are found in the epigraphs, whereas not a single coin of this type has so far been found

21 *Ibid.*, Vol. XXXIII, pp. 134-40; Majumdar, *Ins. Beng.*, Vol. III, pp. 1-9; *Ep. Ind.*, Vol. XII, pp. 136-42.

22 *Ep. Ind.*, Vol. XXX, pp. 259-63; *Ins. Beng.*, pp. 14-24.

23 *Ep. Ind.*, Vol. XV, pp. 278 ff.; *Ins. Beng.*, pp. 63, 66-67.

24 *Ins. Beng.*, pp. 74, 78-79.

25 *Ep. Ind.*, Vol. XV, pp. 283, 286; also *Ins. Beng.*, *op. cit.*, pp. 57-58.

26 *Ins. Beng.*, *op. cit.* pp. 68-80.

27 *Ibid.*, pp. 82-98, 99-105, 81-91, 106-115 (also p. 194), 169-72; *Ep. Ind.*, Vol. XXI, pp. 211 ff.

28 See Majumdar in *Ins. Beng.*, pp. 132-33, and D. C. Sircar in *Ep. Ind.*, Vol. XXXIII, pp. 315-26.

29 *Ep. Ind.*, Vol. XXX, pp. 51 ff.

30 *Ibid.*, Vol. XXIII, pp. 150-54.

31 Cf. H. P. Sastri, *Bauddha-gān O Dohā*, (Vaṅgiya Sāhitya Pariṣad, Calcutta), No. 26—*Kavaḍi na lei Buḍi na lei suchaḍe pārakarāi } jo rathe caḍilā vāhava na jāi kule kule vūlai* || See also *Hist. Beng.*, *op. cit.*, pp. 383 ff. [*Buḍi* is regarded as equal to 5 *Gaṇḍās*=20 cowries.—Ed.]

32 Bhandarkar, *Ancient Indian Numismatics* (Calcutta, 1921), p. 139.

anywhere in the province or the sub-continent. Further, fabrication of such coins, as suggested by Bhandarkar, was difficult and would mark a sudden 'retrogression in the evolution of coinage'.³³ On the other hand, the suggestion of S. K. Chakraborty is that the *Kapardaka-purāṇa* was a mere abstract unit of account ; that is to say, it was the value of a *Purāṇa* counted out in cowrie-shells. In other words, 'payments were made in cowries and a certain number of them came to be equated to the silver coin, the *Purāṇa*, thus linking up all exchange transactions ultimately to silver, just as at present the *Rupee*, the silver coin, is linked up to gold at a certain ratio.³⁴ This suggestion is supported by Minhājuddīn who says that the Muslims, when they came to Bengal, found no metallic currency here,³⁵ and that financial transactions were carried on in cowries.

33 *IHQ*, Vol. VIII, p. 597.

34 *Ibid.*, p. 599.

35 *Hist. Beng., op. cit.*, pp. 668-669 ; see also Minhājuddīn, *Tabaqāt-i-Nāsirī*, trans. H.G. Raverty.

XII

ANCIENT INDIAN COIN HOARDS

D. C. Sircar, Calcutta University

The importance of the study of coins for the reconstruction of the lost history of ancient India is well known to Indologists. A large number of kings of the country, belonging to both indigenous and foreign ruling families, are known only from their coins.¹ In many cases, important historical facts have been deduced from the coins.² Besides political history, often bits of information on the social,³ religious⁴ and economic life⁵ as well as polity and administration,⁶ palaeography and language,⁷ fine arts⁸ and geography⁹ are also offered by coins.

1 Note the case of many of the kings of the Greek and Scythian extraction as well as of the early kings of Mathurā, Ahicchatra, etc.

2 Cf. the coins of Śaka Nahapāna restructured by Gautamīputra Śātakaṛṇi after having extirpated the Śaka ruler, and the issue of the Śaka-type silver coins by the Guptas after their conquest of Western India.

3 Interesting from this point of view are the royal epithets *Māthari-putra*, *Bhāradvājīputra*, etc., indicating the prevalence of marriage involving no *gotr-āntara* of the bride, as also the dress, etc., of kings and queens represented on the coins.

4 Cf. epithets like *Satyadharmasthita*, *Māheśvara*, *Paramabhāgavata*, etc., applied to kings in the coin legends; also legends like 'the city-divinity of Kāpiśī', 'the goddess of Puṣkalāvātī', 'Skanda-Kumāra, Viśākha and Mahāsena', '[coin] of Brahmanyadeva Kumāra', and coins like the Cakra-vikrama type of Candragupta II, Aśvamedha type of Samudragupta and Kumāragupta I, etc.

5 Note the legends indicating the issue of coins by guilds, etc.

6 Cf. the coins issued jointly by kings and their sub-kings and viceroys, e.g., Azes I-Azilises, Azes II-Aśpivarman, etc.

7 Attention may be drawn, in this connection, to the legends on the Śātavāhana silver coins using the ordinary Prakrit and Brāhmī on one side and the Dravidian Prakrit and Brāhmī on the other.

8 Note the representation of gods and goddesses and rarely also of temples on the coins.

9 Cf. mention of Hiranyāśrama on a type of Agathocles' coins, and of places of issue like Tripurī, Kauśāmbī, Airakīṇī (not *Erakīṇa*), etc.

Sometimes important conclusions have been drawn from the composition of particular hoards of ancient Indian coins discovered from time to time. Thus, at the Buddhist *stūpa* at Ahin Posh near Jalalabad, a hoard found by Simpson contained the following gold coins—6 coins of Kadphises II, 10 of Kanishka, 1 of Huviska, 1 of Domitian, 1 of Trajan and 1 of Sabina. This led Percy Gardner to come to the conclusion that, since the rule of the Roman imperial personages cover the period 81–136 A. D., the deposit could not have been buried until 130 A.D., probably in the reign of Huviska.¹⁰ No less than 238 silver coins of the Śaka Satraps of Western India were recovered from a large hoard discovered at Petluripalem in the Guntur District of Andhra Pradesh in the dominions of the Ikṣvākus of Nagarjunikonda far away from the Śaka territory. This peculiarity of the hoard of exclusively Śaka coins being discovered in the distant Ikṣvāku territory has been sought to be explained by the alternative suggestions—(1) that an inhabitant of Petluripalem lived for sometime in the Śaka dominions for trade or for service and returned home with his earnings, though he died before he had an opportunity to utilise the amount, or (2) that a West Indian trader went to Petluripalem in connection with his business, but died there before finishing his work.¹¹ The discovery of a hoard of Kuṣāṇa coins at Dabra Dammo in Abyssinia has been explained by the suggestion that the coins travelled from India to Abyssinia in the course of trade between the two countries in the age of the Kuṣāṇas.¹² Similar instances can be easily multiplied.

Besides the above types of historical information deduced from the hoards of coins, there is a general belief among Indian students of numismatics that coin hoards were interred in ancient India when there was a political unrest in the country.

10 *The Coins of the Greek and Scythic Kings of Bactria and India*, p. 11.

11 Sircar, *Studies in Indian Coins*, p. 151.

12 *Ibid.*, p. 347.

Thus, about the Bayana (Bharatpur, Rajasthan) hoard of nearly 2000 Gupta gold coins, it has been suggested that the unknown owner of the hoard buried it in a field of his own at Hullanpura at the time of the Hūṇa invasion about the beginning of the reign of Skandagupta (455-67 A.D.) because the hoard contains 209 coins of Samudragupta (including the Kāca and Candragupta-Kumāradevī types), 983 of Candragupta II, 628 of Kumārāgupta I and only one of Skandagupta.¹³ Likewise, the Sanchi and Gondarmau hoards of the silver coins of the Śakas of Western India exhibiting no coin of the non-Śaka Mahākṣatrapa Īśvaradatta have been supposed to point to his recent conquest of the Śaka dominions, and the following conclusion has been drawn on the basis of the said hypothesis : "This menace caused panic among the people and they buried their treasures during the beginning of Īśvaradatta's reign."¹⁴ There are several other cases of similar views expressed by scholars.

In a few among the recorded cases, the cause of the burying of treasures may be the political turmoil of the time. This reminds us of one of the largest hoards of coins ever discovered in India. In the year 1956, while digging the lawn of the palace of the Raja of Hathwa at Chhapra in the Saran District of Bihar, 9,40,000 silver Rupees weighing 9,23,179 Tolas (i.e. 257 Maunds, 9 Seers and 59 Tolas) were unearthed. They were found in 59 jars of brass or copper. The maximum and minimum numbers of coins in a jar were 94,000 and 11,000 respectively. The coins bear the names of Shāh 'Alam II and Queen Victoria and were produced at the mints of the English East India Company at the Fort William (Calcutta), Murshidabad, Banaras and Farrukhabad. It has been supposed that the coins belonging to the treasury of the Hathwa Raj were buried underground during the troubled

13 A. S. Altekar, *Catalogue of the Gupta Gold Coins in the Bayana Hoard*, pp. ii-iii.

14 *JBBRAS*, Vol. XXX, 1955, p. 55.

days of what is called the Sepoy Mutiny or the First Indian War of Independence about the middle of the nineteenth century, when the Raja was doubtful about his capacity to defend his treasury if attacked.¹⁵

It is, however, difficult to believe that hoards of coins were buried in ancient India only when there was a political unrest in the country. The practice of interring accumulated wealth in cash and precious objects was common in all parts of ancient and medieval India. As we have elsewhere noticed, "It was a popular practice in the villages in many parts of the country as late as the closing years of the last century. The reason is that, on the one hand, there were no Savings Banks in ancient and medieval India as we have them now and, on the other, often the lives of the people were insecure and their wealth lay at the mercy of thieves and robbers. Of course, the unsocial elements were occasionally kept under check by vigorous and capable rulers."¹⁶

Because the people were often dishonest, the experience of persons depositing their money with merchants or bankers was usually unsatisfactory. Kalhaṇa's *Rājatarāṅgiṇī* contains a story of such a deposit, which illustrates the difficulty a depositor had often to face in getting back his money.¹⁷ In describing the position, Kalhaṇa says, "The wicked merchant, however, was anxious to embezzle the deposit and deceitfully delayed payment under various pretexts. The water which has been carried down to the ocean by the streams is received back from the clouds ; but a thing deposited in a merchant's hands is never again recovered. A merchant in a law-suit relating to the embezzlement of a deposit is more to be dreaded than a tiger ; because he shows a face smooth as oil, uses his voice

15 Sircar, *Studies in Indian Coins*, p. 310. The largest hoards of ancient Indian coins consisted of 13,250 silver coins of Nahapāna from Jogalthambi (Rapson, *Cat.*, p. lxxxviii), and 8000 punch-marked silver issues discovered at Amaravati (*Indian Archaeology*, 1953-54, p. 39).

16 Cf. Sircar, *op. cit.*, p. 149.

17 *Op. cit.*, VIII. 124 ff.

but little and shows a gentle appearance.”¹⁸ This is why people preferred to bury their surplus wealth under the ground.

We have innumerable references to buried treasures which belonged to the king in the absence of their owners.¹⁹ The king's relegation of claim to *nidhi* or treasure-trove to be discovered in the gift land, in favour of the donees of rent-free holdings, is mentioned in numerous copper-plate grants.²⁰ There are many stories in early Indian literature, in which people are found to have buried their money under the earth for fear of thieves and robbers. The popularity of the practice led to the general belief about unclaimed buried treasures protected by the Yakṣas.²¹ The *Mṛcchakaṭika* refers to the custom of interring wealth 'for the fear not only of thieves but also of the king and again to the thieves' capacity to discover and steal the treasure hidden under earth.²² The *Kuhaka Jātaka*²³ speaks of a landlord who buried a hundred gold coins, not in his own house as it would be expected by the unsocial elements, but under the floor of an ascetic's hut.

The *Kathāsaritsāgara* tells us how a person went to the forest and buried his savings of 1000 *dināras* (gold coins) in the ground there at the foot of a tree.²⁴ The popular practice of burying treasures near a tree was due to the fact that the spot would then be easily traced even after a long time.

18 *Ibid.*, VIII. 127-29.

19 See Kane, *Hist. Dharm.*, Vol. II, p. 146; Vol. III, p. 175. If the discovery of the treasure-trove was made by a learned Brāhmaṇa, he was allowed to enjoy it. In other cases, if the discoverer honestly informed the king about it, he was given $\frac{1}{8}$ of the treasure.

20 Cf. *sa-nidhi*, *sa-nidhi-nidhāna*, *sa-nidhi-nikṣepa*, *sa-nidhy-upanidhi*, etc. (Sircar, *Indian Epigraphical Glossary*, p. 402).

21 See *The Ocean of Story*, Tawney and Penzer, Vol. II, p. 52; Vol. III, p. 133.

22 Act III (Siddhantavagisa's ed., p. 223).

23 Vol. I, No. 89.

24 Tawney and Penzer, *op. cit.*, Vol. III, p. 119. For treasure buried under a *nyagrodha* tree, see *ibid.*, Vol. II, pp. 159-60.

Sometimes gold was put in a jar which was interred in a corner of the compound of one's house.²⁵

Because of the widely prevalent practice of interring money in the ground, the discovery of unclaimed wealth underground was frequent in ancient and medieval India as it is even today. Often people died after burying their wealth in the ground and it was occasionally discovered by erosion of the land or in the course of its excavation or cultivation at the stroke of the workman's spade or the cultivator's ploughshare.

In *JNSI*, Vol. XXIII, pp. 128-32, R.C. Majumdar published a short note in which he comments on the beliefs—(1) that the coin hoards 'were consequents of foreign invasions which caused their owners to conceal them as a measure of security', and (2) that 'the larger the number of coins belonging to a particular king [in a hoard] the nearer was he to the time of the hoard'. We agree with Majumdar's conclusions, but not entirely with his arguments.

Majumdar is right when he says, "general insecurity from thieves and robbers must be presumed to be the chief reason in most cases"; but his main argument seems to be weak. He says, "As a large majority of hoards, so far discovered, contained a number of coins small enough to be easily carried by a person, it may be assumed that the hoarding, as a rule, need not be looked upon as merely due to fear of foreign invasion." It, however, seems to us that the ordinary traveller of ancient and medieval India was usually afraid to carry with him even 10 gold or 20 silver or 50 copper coins for fear of losing his life on the road which was almost always insecure.

Again Majumdar says, "It may be argued that big hoards, like that at Bayana containing 1821 coins, could not be easily carried away and, therefore, must have been left in a panic when the owner fled for safety against a foreign attack. But there is no valid reason for this conclusion. There is a long interval of more than 130 years between the issue of the oldest

25 *Ibid.*, Vol. II, p. 87.

and the latest coins of the hoard. It may be easily presumed, therefore, that the collection extended over several generations." It is, however, not possible to agree with this view, because there is evidence to show that, in ancient and medieval India, coins once in the market remained in circulation for centuries.²⁶ This explains facts like the following one noticed by Majumdar : "Of the 1821 coins of this [Bayana] hoard, 983 belong to Candragupta II and only 628 to the next reign. There is a single coin of Skandagupta. In other words, the large majority of coins belong to a king who must have ceased to reign more than half a century before the coins were hoarded."²⁷ Since the coins issued by Skandagupta's predecessors were in circulation during his reign, there is no reason to conclude that several generations were responsible for the accumulation of the Bayana hoard. However, we agree with Majumdar's conclusion that "the disparity in the number of coins belonging to Candragupta II and Kumāragupta I cannot be put down to such assumptions as are generally made, namely, either the longevity of the reign or the proximity of the reign to the hoarding."

26 Cf. Sircar, *Studies in Indian Coins*, pp. 103-04. Note also the case of the Kṛṣṇarāja-rūpaka (*ibid.*, pp. 69, 301).

27 The intervening period between the death of Candragupta II about 413 A. D. and the accession of Skandagupta in 455 A.D. is less than half a century.

XIII

NUMISMATIC NOTES

Samaresh Bandyopadhyay, Centre of Advanced
Study in AIHC, Calcutta University.

1. Coin Testing

Testing of coins, evidently to maintain their standard and purity, is essential in a coin-using economy, and this seems to have received due attention in India from quite early times.

Welcome light has been thrown on the issue by the *Arthasāstra* of Kauṭilya which mentions an officer called the *Rūpadarśaka*¹ and, while enumerating his duties, states—*rūpikam = aṣṭakam śataṁ pañcakam śataṁ vyājiṁ pārīkṣikam = aṣṭa-bhāgikam śataṁ pañcaviṁśati-panam = atyayaṁ ca anyatra kartṛ-kreṭṛ-vikreṭṛ-parīkṣitṛbhyaḥ*, i.e., he had to collect the *rūpika* of eight per cent, the *vyāji* of five per cent, the *pārīkṣika* (testing charge) of one-eighth *pana* per cent, and the fine of twentyfive *panas* imposed on offenders other than the manufacturer, seller, purchaser and examiner. The said officer collected the testing charge probably for examining whether a coin was genuine or counterfeit and for determining its value, particularly when it was an old coin. The *Arthasāstra* further lays down that the state accepted coins in the royal treasury after a thorough examination of them by the *Rūpadarśaka* : *Rūpadarśako viśuddham hiraṇyam pratigṛhṇīyāt*, i.e., the *Sannidhātṛ* or treasurer should accept only such coin or money as has been declared genuine by the *Rūpadarśaka*. The *Arthasāstra* also states that the *Rūpadarśaka* should cut the bad coins (*aśuddham chedayet*)². It thus seems to establish the existence of the system of coin-testing and, in doing so, the *Rūpadarśaka* is required to be very

1 See our paper in *JAIH*, Vol. II, pp. 95-97.

2 Rejection of bad coins by cutting is still practised.

careful, for upon his approval depended whether any particular coin should be accepted or not. It is also stated that the same officer had to pay a fine of 12 *paṇas* if an unacceptable coin was approved for circulation by him or an acceptable one rejected.³

Besides the *Arthaśāstra*, certain other texts mention officers entrusted with the duty of examining coins.⁴ Thus, the *Mahābhāṣya* of Patañjali refers to *Rūpatarka* and associates him with the examination of *kārṣāpaṇa* coins.⁵ We have also the *Yājñavalkyasmṛiti* speaking of the *Nāṇakaparīkṣin*, i.e. the examiner of *nāṇaka*, apparently used in the general sense of coin, as we have shown in the *Numismatic Chronicle*, 1969, pp. 305-08. *Nāṇaka* and *Nāṇakaparīkṣā* have also been used respectively in the sense of a coin and the testing of the genuineness of coins in the *Prabandhakośa* (1349 A.D.) of Rājaśekhara-sūri. Buddhaghosa's *Visuddhimagga* mentions *Hairaṇyika* and states that he had to examine the coins thoroughly and carefully to detect which coin had lost its original value and which was genuine and which counterfeit. He had also to determine the places whence a particular coin was manufactured, and the manufacturer or mint-master of any particular coin. Thus, the duties of the *Hairaṇyika* were almost similar to those of the *Rūpadarśaka* of the *Arthaśāstra*. D. R. Bhandarkar thought that the *Rūpadarśaka* was a very big officer and it was rather unusual that he would examine the coins personally. He, therefore, suggested that the said officer had under him a number of subordinate officials of whom the *Hairaṇyika* (of Buddhaghosa)

3 *Rūpadarśakasya sthitāṁ paṇa-yātrām=akopyāṁ kopayataḥ kopyām=akopayato dvādaśa-paṇo daṇḍaḥ* (*Kauṭīliya Arthaśāstra*, ed. R. P. Kangle, 1960, Part I, 4.1.44, p. 130). According to A.B.L. Awasthi, *Rūpadarśaka* was to see whether the *rūpas* are properly represented or not (*JNSI*, Vol. XXVI, 1964, p. 51). We, however, think that this was more probably the duty of the *Lakṣṇādhyaṅkṣa*.

4 For officials like the *Rūpyādhyakṣa*, *Naiṣkika*, *Suvarṇādhyakṣa*, *Rūpadakṣa*, *Taṅkapati*, etc., not specially spoken of as examining coins, but described as dealing with coins, see *JAIH*, Vol. II, pp. 94-103.

5 *Ibid.*, p. 97.

or *Sauvarṇika* (of the *Arthaśāstra*) was one, while we have drawn attention elsewhere to *Sauvarṇika* of the *Aṅgavijjā* and the *Hairanyika* mentioned in a large number of inscriptions.⁶ Whatever might have been the relationship between one officer and the other mentioned in different texts, there is little doubt that they all speak of coin-testing by royal officers, regarding which there is more evidence in the *Prabandhakośa* of Rājaśekhara-sūri and the *Purātanaprabandhasaṅgraha* which refer to *Drammasustha* and *Drammasaustha* respectively.⁷ The designation *Drammasaustha*, literally meaning 'well-versed in *dramma*', may denote officers well aware of the pros and cons of the *drammas* or coins. The *Pṛthivīrājaviṇaya* of Jayāṇaka also tends to show that there was some testing agency for selecting good coins.⁸

Apart from the above references to the examination of coins and to the officials examining them, mention may be made of the *Lekhapaddhati* passages referring to the examination of such coins as *viśvamallapriya* or *viśalapriya-dramma* and *pāraupatha* or *pārūpatha-dramma*. The passages are the following : (1) *Śrīśrīmālīya-kharaṇaṅkaśālāhata-triḥparīkṣita-haṭṭavyavahāra-jirṇaviśvamallapriya-dra.....*;⁹ (2) *Śrīśrīmālīya-kharaṇaṅka-śālāhata-triḥparīkṣita-haṭṭavyavahārikya-pracarāt-śreṣṭha-dvivallakya-viśalapriya-dra.....*;¹⁰ (3) *Śrīśrīmālīya-kharaṇaṅkaśālāhata-triḥparīkṣita-haṭṭavyavahārikya-pracalita-śreṣṭha-śrīmat-pāraupatha-raukya-gṛhīta-dra.....*;¹¹ (4) *Śrīśrīmālīya-kharaṇaṅkaśālāhata-triḥparīkṣita-haṭṭavyavahārikya-pracarāt-śreṣṭha-śrīmat-pārūpatha-gṛhīta-dramma.....*¹²

6 *Ibid.*, p. 100.

7 *Ibid.*, pp. 102-03.

8 *Op. cit.*, ed. S. K. Belvalkar, Calcutta, 1914, XI. 19.

9 *Lekhapaddhati*, ed. C. D. Dalal, Baroda, 1925, p. 20.

10 *Ibid.*, p. 42. [Better read *dvivallakya-śreṣṭha*.—Ed.]

11 *Ibid.*, p. 34.

12 *Ibid.*, p. 43. Some scholars take Viśvamalla or Viśala as a king's name. But, as we have shown in *JNSI*, Vol. XXX, pp. 96-101; both Viśvamalla or Viśala and Pāruttha were probably merchants or bankers. Cf. also D. C. Sircar in *Ep. Ind.*, Vol. XXXVII, pp. 277-78.

The word *gr̥hita* in the third and fourth passages clearly shows that the coins were accepted, but that they required to be tested thrice, i.e. thoroughly and carefully, before being accepted. The *Lekhapaddhati* thus furnishes a very good account of coin-testing. What is stimulating in this connection is the evidence of an inscription¹³ from Dhod (Rajasthan), dated 1170 A. D., which states that 16 *drammas* of Ajayadeva were tested before being approved.

2. Citta-vicitta

The expression *citta-vicitta* (*citra-vicitra*) occurs in a passage of the *Visuddhimagga* of Buddhaghosa.¹⁴ The passage runs as follows : *a-jāta-buddhi-dārako Kahāpaṇānaṃ citta-vicitta-dīgha-caturassa-parimaṇḍala-bhāva-mattam = eva jānāti idaṃ manussānaṃ upabhoga-paribhogaṃ ratana-sammataṃ ti na jānāti : gāmika-puriso citta-vicitt-ādi-bhāvaṃ jānāti idaṃ manussānaṃ upabhoga-paribhogaṃ ratana-sammataṃ ti ca.*

D. R. Bhandarkar translated the expression *citta-vicitta* in the passage as 'of irregular form',¹⁵ probably because it occurs along with *dīgha-caturassa-parimaṇḍala* which is certainly the description of the different shapes of the *kahāpaṇa* or *kārṣāpaṇa* coin, *dīgha* (*dirgha*), *caturassa* (*caturasra*) and *parimaṇḍala* meaning respectively oblong, square and circular. But as C. D. Chatterjee points out, the literal meaning of the word is 'bearing haphazard marks', and the expression should better be taken to mean the different symbols (*lakkaṇa*) of the *kārṣāpaṇa* coins and not their 'rude and ugly' fabric.¹⁶ The description of the marks on the punch-marked coins as *citta-vicitta* seems quite appropriate as they are impressed haphazardly upon the surface of the coins. D. C. Sircar accepts

13 *Annual Report of the Rajputana Museum, Ajmer, 1922-23, p. 2.*

14 *Visuddhimagga, PTS ed., pp. 437, 515.*

15 *Cormichael Lectures, 1921, p. 148.*

16 C. D. Chatterjee, 'Some Numismatic Data in Pali Literature', in *Buddhist Studies*, ed. B. C. Law, p. 432 and note.

Chatterjee's translation of the expression while utilising the passage to show that, in ancient India, the issues of private moneyers went side by side with the state issues.¹⁷ We have also adopted the same meaning while discussing the duties of the *Hairanyika*.¹⁸ Recently we have come across a passage in the *Aṅgavijjā*, a Jain text written in Prakrit about the close of the Kuṣāṇa age and probably retouched during the days of the Guptas, which seems to support Chatterjee's translation. The passage is as follows : *Caūraṁsesu niaddhesu cittesu kahāvaṇaṁ buyā*¹⁹ (Sanskrit *caturasreṣu nibaddheṣu citreṣu dṛṣṭeṣu kārṣāpaṇaṁ brūyāt*). It means that that should be regarded as a *kārṣāpaṇa* which is square or rectangular in shape and on which symbols or figures are seen. Significantly enough, we have also noticed the description of *rūpaka* as *citrastha*, i.e., 'bearing marks' in the *Prthivīrājaviṣaya-mahākāvya*.²⁰ Now, *rūpaka* being generally considered as a synonym of *kārṣāpaṇa*, its description as 'bearing marks', also goes to support the translation of Chatterjee.*

3. Rūpa

The word *rūpa*, as D. R. Bhandarkar points out,²¹ is used in the sense of 'coin' not only in several places of the *Arthaśāstra*,²² but also in many other records.²³ The *Mahāvagga* of

17 *Studies in Indian Coins*, Delhi, 1968, pp. 102-03.

18 *JAIH*, Vol. II, pp. 98-99.

19 *Aṅgavijjā*, ed. Punyavijaya, Chapter X, p. 134.

20 Ed. S. K. Belvalkar, Calcutta, 1914 (XI. 22).

* [*Citra-vicitra* seems to mean *citrair=vicitram*, 'ornamented by pictures (i.e. symbols)', 'beautiful on account of pictures', while *caturasreṣu nibaddheṣu citreṣu dṛṣṭeṣu* (in which *caturasra*=square or rectangular; *nibaddha*=formed of, furnished with; *citra*=picture, i.e. symbol; *dṛṣṭa*=visible) may be explained as 'when [a coin is] square or rectangular [in shape] and is endowed with [clearly] visible pictures or symbols'. *Citrastha=citrasthita*, 'appearing in a picture'.—Ed.]

21 *Carmichael Lectures*, 1921, pp. 124-25, 131.

22 Ed. R. P. Kangle, 1960, Part I, 2.5.10; 2.9.28; 2.12.25; 4.1.44; 4.4.20-21; pp. 40, 47, 57, 130-31.

23 See our paper in *Journ. Anc. Ind. Hist.*, Vol. II, pp. 95-97 and notes 11-22.

the Southern Buddhists²⁴ and the Hāthigumphā inscription²⁵ of Khāravela refer to the learning of *rūpa*, i.e., the science of coinage, by Upāli and Khāravela respectively. The word has also been used in the same sense by Patañjali,²⁶ and by Buddhaghosa in his commentary on the *Mahāvagga* passage stating that one intending to learn the *Rūpasutta* (Sanskrit *Rūpasūtra*),²⁷ i.e. a set of rules concerning coins, must turn over many *kārṣāpaṇas* and look at them. Bhandarkar also points out that the word has the same meaning in the *Vinaya-piṭaka* which states that, after about a century since the death of the Buddha, the venerable Yasa once came to Vesāli in course of his tour and stayed with the Vajjian monks ; on an *uposatha* day, he felt sorry to see the monks filling a copper-pot with water and placing it in the midst of the *saṅgha* and saying to their lay disciples : ‘Give, sirs, to the *saṅgha* one-half, or one-fourth *kārṣāpaṇa* or *māṣaka-rūpa*.’²⁸ Besides these works, the word has been noticed in the sense of ‘coin’ in the *Mahāsupina Jātaka*.²⁹ The word *lupa* (Sanskrit *rūpa*) in the expression *Lupadakha* (Sanskrit *Rūpadakṣa*) occurring in the Jogimara cave inscription³⁰ has also been taken to stand for ‘coin’ by some scholars.³¹

Thus, the literary and epigraphic records show that the word *rūpa* was used to mean ‘coin’. In this connection, Bhandarkar observed that though ‘the import of the term *rūpa* survived to a very late period,.....it was by no means in vogue after the beginning of the Christian era,’³² and in a footnote he refers to the *Kāśikā* which mentions *rūpaka* and not *rūpa*.

24 SBE, Vol. XIII, pp. 201 ff. ; cf. also Bhandarkar, *op. cit.*, pp. 124-25.

25 *Ep. Ind.*, Vol. XX, p. 81.

26 *Journ. Anc. Ind. Hist.*, Vol. II, p. 97 and note 23.

27 *Ibid.*, Vol. I, p. 32 and note 10.

28 SBE, Vol. XX, p. 387 ; cf. also Bhandarkar, *op. cit.*, p. 131.

29 I. 177 ; cf. also JNSI, Vol. XV, p. 38.

30 *Ep. Ind.*, Vol. II, p. 31.

31 *Journ. Anc. Ind. Hist.*, Vol. II, p. 97 and notes 24-26. Some scholars take *Rūpadakṣa* to mean a painter or sculptor here.

32 *Op. cit.*, p. 131.

Therefore Bhandarkar seems to believe that the word *rūpa* was substituted by *rūpaka* after the beginning of the Christian era. There is no doubt that the word *rūpaka* used in the sense of coin has been met with in a large number of literary and epigraphic records of ancient and medieval India ;³³ but, in view of the fact that *rūpa* has also been noticed to stand for 'coin' or 'money' in a work of much later date, Bhandarkar's view seems to require a little modification. The work is the *Prthvīrājavi-jaya* of Jayāṇaka³⁴ which also mentions the *rūpaka* coins of Ajayadeva and Somalekhā.³⁵ In one place of the work, the poet upholds the supremacy of wealth ;³⁶ in another he states that on wealth only is based the king's fame in all the three worlds,³⁷ and in a third he asserts that, with the help of money, lost strength and youth could be regained,³⁸ and it is interesting to note that in all the places the word *rūpa* has been used for 'wealth' or 'money'.³⁹

33 *JNSI*, Vol. XIX, pp. 115-20 ; Vol. XX, pp. 15-16.

34 Ed. S. K. Belvalkar, Calcutta, 1914.

35 V. 87-89.

36 XI. 22.

37 V. 141.

38 V. 136.

39 For *rūpa* in this *Kāvya* in the sense of both 'money' and 'form', see *JNSI*, Vol. XXXI, p. 50.

INDEX

- Ābhīra 11, 81
 Abyssinia 148
 Acaṇḍavarman 91
 Acharya, Narayan 142
Adhyardha-Suvarṇa 33
Adhyardha-Vimśatikā 45
Ādivarāha 73
 Afghanistan 13, 54
 Agade 14
 Agathocles 47-48, 105, 147
 Agratya 62
 Agrawala, V. S. 24-25, 31-34, 36, 41-45
 Ahicchatra 123, 147
 Ahin Posh 148
 Ahmed, N. 3-9
 Airakīnī 147
 Aitareya Brāhmaṇa 12, 17
 Ajayadeva 157, 160
 Ajayapāla 75
 Ajayarāja 73, 75
 Ajmer 157
 Akkadian level 13
 Akola District 84
 Alexander 18, 31, 47, 52, 56
 Allahabad 129 ; Museum 109, 129
 Allan, J. 77, 100-02, 105, 107-08, 123, 129
 Almora 59-60
 Altekar, A. S. 5, 24, 27, 31-32, 64, 82, 107, 113-15, 122, 124-25, 149
 Ālupa 134
Amarakoṣa 37, 40, 42, 142, 144
 Amarāvati 83, 150 ; hoard 132
 Ambikā 63
 Amoghabhūti 60
 Amṛtapāla 76
 Ānanda 88-90
 Anantapur 88
 Andhra 83, 131, 134
 Andhrabhṛtya 21, 47
 Āndhradeśa 114
 Andhraka 82
 Andhra Pradesh Government Museum 91, 132, 134-35
 Aṅga 55
Aṅgavijjā 8-9, 156, 158
 Antonines 22
 Anulia plate 145
 Aparānta 85
 Apollodotus I Soter 48
 Appadorai, A. 138-39
Apratigha coins of Kumāragupta 65
 Arabian sea 14
Arahaṇaṣa 87
 Archaic coins 48, 50-51, 57, 82
 Archaic punch-marked coin 75
Ardha-Kākaṇī 42
Ardha-Māṣaka 42
Ardha-S'atamāna 19, 31
 Ardokhso 63, 65-67
 Arjuna 29
 Ārjunāyana 62
 Arthapati 70
Arthaśāstra 8, 18, 32-34, 37, 41-46, 49, 141, 154-56, 158
 Aryans 16
 Āśāpurī 76
 Aśmaka 82
 Aśoka 108, 125
 Aśpavarman 147
Aṣṭabhāga 32, 42
Aṣṭadhyāyī 24, 32, 35-36, 41, 43-45
aśuddha coins 10
 Aśvaka 109
Aśvamedha 65, 147
Atakatakā 102
Atharvaveda 17, 29

- Attic—drachm 66-67 ; standard 72
 Audumbara 61-62
 Avantivarman 68, 71
 Awasthi, A.B.L. 155
ayas 29
 Ayodhyā 59, 109, 129-30 ; coins 6
 Azes 47
 Azes I 147
 Azes II 147
 Azilises 147
 Babylon 14
 Bādāmī 81, 92, 134
 Badāun 76
 Bahera 125
 Bahrein 14
 Bahudhānyaka 109
 Baigrām copper plate 143
 Bairāt 123
 Bajpai, K. D. 103-04
 Bajpeyi, Sm. K. 3
 Balharā 134
 Ballālasena 145
 Balpur 86
 Baluchistan 28
 Banaras 9, 149
 Bandyopadhyay, S. 3-5, 7-10, 103, 154
 Banerjea, J. N. 102
 Banerjea, Pramathanath 128
 Banerjee, N.R. 123
 Banerjee, Sm. S. 3
 Bangarh 124 ; plate 144
Baṇṭapaṇa 139
 Barbosa 139
 Baroda 156
 Barrackpore plate 145
 Barua 141
 Barygaza 80
 Basak, R.G. 143
 Basana, Basata, Pasata 5
 Basarh 122, 124
 Bastar 70
 Bayana hoard 149, 152-53
 Bellary District 139
 Belvalkar, S.K. 156, 158, 160
 bent-bar coins 5, 32, 50-51, 81, 122
 Berar 84
 Besnagar 41-42, 123
bhāga 43
 Bhagalpur 55
 Bhagilā 107-08
 Bhandara District 111
 Bhandarkar, D. R. 19, 24, 26, 30, 32, 41-43, 102, 113, 120, 128, 141, 145-46, 155, 157-60
 Bharadvāja 89
Bhāradvājaputra, *Bhāradvājiputra* 147
 Bharhut 47
 Bharata 20
 Bhārat Kalā Bhavan 129-30
 Bharatpur 149
 Bhāskarācārya 141, 144
 Bhaturia inscription 145
 Bhavadatta 70
Bhāvaprakāśa 39
 Bhāvayavya 17
 Bhīmasena 71
 Bhīr mound 31, 101
 Bhoja I 73
Bhujabalamāṇḍa 138
 Biddulph, C. H. 100, 137
 Bijjala Tribhuvanamalla 93
 Bimbisāra 44, 125
 Bindusāra 125
biruda 70
 Bodhgayā 47 ; inscription 144
 Bodhi 81, 91, 131
 Bogra District 141, 143
 Bombay 113, 142
 Bose, A. N. 21, 40, 43-44, 46-47
 Brāhmaṇa 151
 Brahmanyadeva Kumāra 147
 Brahmapuri hoard 89
 Brāhmī 59-60, 86, 114, 141, 147
 Britain 132
 British Museum 77, 100, 123, 128, 131
 Brown, C. J. 100

- Bṛhaspati 21, 46
 Buddha 159
 Buddhaghoṣa 7-9, 21, 23-24, 37, 44,
 47, 50, 102, 104, 107, 110, 128,
 155, 157, 159
 Budhagupta 64, 143
Buḍi 145
 Bühler, G. 102
 Burma 94
 Cāhaḍa 76
 Cāhamāna 73-76
Cakra 95, 97
Cakram 80
Cakravikrama 65, 147
 Calcutta 132, 144-45, 149, 156, 158,
 160
Caltis 142
 Cālukya 7-8, 50, 81, 92-93, 100, 134,
 138 ; Rājarāja 137
 Cālukyacandra 94
 Cambridge 133
 Caṇḍavarman 91
 Candella 74
 Canden 142
 Candra dynasty 145
 Candrabodhi 92
 Candragupta I 64
 Candragupta II, 5, 65, 71, 119, 147,
 149, 153
 Candragupta-Kumāradevi | type coin
 149
 Candragupta Maurya 125
 Candravarman 91
 Cantamūla 91
 Caraka 33
Carakasamhitā 39
 Carnatic 92
Caryāpada 145
Cash 80
Caṣṭana 47, 119
 Cast coins 55
Catuṣ-kaparda 29
 Central India 56, 66, 71, 112
 Cera 81, 94, 97-99
 Ceylon 83, 96, 136
 Chakraborty, S. K. 102, 141, 146
 Chakramadas 124
 Chakravarti, A. K. 3
 Chanāki 124
 Chanda—District 47, 84 ; hoard 85
 Chandraketugarh 124
 Chandravalli 84, 88-89
 Chatterjee, A. K. 3
 Chatterjee (Chattopadhyaya), B. D.
 3-4, 7-8, 131
 Chatterjee, C. D. 5, 157-58
 Chhapra 149
 China 128
 Chinmulgund, P. J. 114-15
 Chitaldrug District 88
 Chitorgarh 61
 Chitradurga (Chitaldrug) 84
 Choudhury, C. R. 124
 Choudhury, R. K. 125
Cinakkanakam 136
Citrastha 158
 Cittarāja 136
citta-vicitta (citra-vicitra) 157
 Coimbatore 83, 97
 Cola 81, 86, 94-95, 98-100, 134-35,
 138 ; Rājarāja 137
 Comilla 143
 Coromandel coast 84, 86, 95
 cornucopiae 63
 Crawford, O. G. S. 132
 Cuddalore 84
 Cuddapah District 88
 Cunningham, A. 45-46, 54, 68, 102,
 105, 144
 cup-shaped coins 5, 50, 52
 Cuṭu 90
 Cuṭukaḍānanda 89
 Caṭukula 90
 Dabra Dammo 148
 Daeca 141
 Dāhala 66, 74
 Dakṣiṇā 30
 Dalal, C. D. 156
 Dāmasena 91

- Damodarpur copper-plate inscription 143
 Daṇḍin 142
 Darbhanga 125
 Daśaratha 19-20, 125
 Das, D. R. 7, 10
 Dasgupta, K. K. 9
Daśakumāracarita 142
 Das, Sm. S. 3
 De, B. B. 3, 8, 141
 Deccan 78, 80-82, 84, 86, 90, 92, 111-12, 139
 Delhi 75-76, 117, 158
 Demetrius 47
denarius aureus 142
 Deo, S. B. 111, 123
 Desikachari, T. 92-93, 100
 Deva dynasty 145
 Devapāla 144
 Dikshit, K. N. 144
 Dikshit, M. G. 112, 123
 Dilmun, Telmun 13-14
Dināra 4, 8, 46, 66, 79, 142-44, 151
Dināra-māṣaka 4, 8
Dināri, Dināri-māṣaka 134
 Dhanadeva 129
Dharaṇa 23, 31, 36, 42, 46, 49
 Dharasena 91
 Dharmāditya 144
 Dharmapāla 144
 Dharwar 139
 Dhod 157
 Dhruvamitra 110
Dojaka 102
 Domitian 148
Dosanasa 102
 Dowlaishwaram hoard 137
 Dowson, J. 134
Drachm 61, 64, 71-72, 79
Dramma 10, 67, 79, 144, 156-57
Drammasaustha, Drammasustha 156
 Dravidian Prakrit 147
Droṇa 34
Droṇavāpa 143
 Droplet coin 58
 Durgā 63
 Durga Prasad 31-32, 44-45, 77, 125
Dvai-śāna 33
Dvinaīṣkika 25
Dvi-niṣka 25
Dvi-suvarṇa 33
dvi-vallakya 156
Dvivimśatikā 45
 Eastern India 66, 69
 East India Company 80, 149
 Ehuvala Caṁtamūla 91
 Elliot, H. M. 134
 Elliot, W. 95, 100
 Erakina 59
 Eraṇ 107, 129
 Ethiopia 11
 Eucratides 109
 Euphrates 14
 Fa-hien 29
Fanam 79-80, 93-96
 Faridpur plate 143-44
 Farrukhabad 149
 Ferishta 139
 Fīrūz 71
 Fort William 149
Gadhaiyā-Paisā 72
Gadyāṇa 98, 138
 Gāhaḍavāla dynasty 74-76, 120
 Gajapati 79 ; *Pagoda* 97
gaṇa 61-62
Gaṇḍā 141, 145
Gaṇḍaka 8, 141-42
Gandhavāraṇa-māḍa 135
Gandhika 104
 Gaṅga dynasty 81, 92, 95, 100, 134
 Gaṅgā 92
 Gaṅgādhara 39
Gaṅgaikoṇḍa-cola 99-100
Gaṅgamāla Jātaka 43
 Gange 142
 Gāṅgeyadeva 66, 74, 98
 Gardner, Percy 148
 Garga 17

- Garuḍa 70
Gāthāsaptasāri 10
 Gautamīputra Śātakarṇi 5-6, 85-87, 114-19, 147
 Gautamīputra Yajña-Śātakarṇi 5, 86-87, 113-15, 117
 Gayā 124, 129
ghaṭa 67
 Goa 94, 134
 Godavari District 85
 Gokhale, Sm. S. 3, 6
 Golakhpur hoard 125
 Gomitra 61
Goṇḍā 141
 Gondarmau hoard 149
 Gopacandra 144
 Gopal, Lallanji 77, 125
gotr-āntara 147
 Govindacandra 75, 120
 Govindapur 145
 Greece 13
 Grimes, W. F. 132
 Gṛtsamada 17
 Gujarat 72, 91, 113-14, 119
 Gunaighar plate 143
 Guṇāve 120
Guñja 21, 33
 Guntur District 90, 148
 Gupta brass coins 5
 Gupta, P. K. 82-83, 100, 108, 113, 117, 132-33
 Gupta, Sm. C. 3, 6
 Gurjara-Pratihāra dynasty 66
 Guval 29
Hāga 138
 Hagāmaṣa 61
 Hagāna 61
Hairanyika 155-56, 158
 Harappa 15-16
 Haridatta 60
 Harigupta 71
 Harinarayanpur 124
 Harita 29
 Hārītīputra 88 ; Viṣṇukaḍa-Catukulānanda 89
 Hariyana 74
 Harṣa 79
 Harṣadeva 68-69, 97
 Hastināpur 123
Hātakaṇi 87
 Hāthīgumphā inscription 24, 159
 Hathwa Raj 149
Hera-dramma 135
Hidujasame, Hirannasame 102, 105
Hiraṇya 8, 30, 34, 37, 143-45
Hiraṇya-kṛṣṇala 18
Hiraṇya-piṇḍa 17, 23, 27
 Hiranyāśrama 147
hiru = śrī 87
 Homer 11
 Hoysala 134
 Hullanpura 149
Hūn 80
 Huṇa 5, 64, 71-72, 149
 Huviṣka 148
 Huzur Jawāhirkhānā 73
 Hyderabad 87, 89, 132, 134-35
 Ikṣvāku dynasty 4, 81, 90, 134, 148
Ilakkaruṅgāśu 136
Ilakkāśu 136-37
 Indian Museum 77, 100, 122, 124, 144
 Indo-Greek 47-49, 61, 64, 75, 104, 127
 Indore 73
 Indo-Sassanian coins 136
 Indra 17
 Indradatta 91
 Indus 14 ; valley 13-15, 49 ; civilization 18
 Iran 13
 Īśānavarman 71
 Island of Yap 11
 Īśvaradatta 91, 149
 Jaipur 61
 Jajapella 76
 Jalālābād 148

- Jālor 76
 Janaka 26
janapada 62, 82
 Jaruttha pattalā 120
 Jayacandra 120
 Jayagupta 71 ; Prakāṇḍayaśas 69
 Jayakeśin III 94
 Jayanāga 144
 Jayāṇaka 156, 160
 Jayasimha II Jagadekamalla 93
 Jayaswal, K. P. 124
 Jayavarman 74
 Jeṭākabhukti 74
 Jevons 15
 Jhansi 73
 Jhusi 129
 Jñānadeva 128
 Jogalthambhi hoard 86, 115, 118, 150
 Jogimara cave inscription 159
Juṇha Jātaka 26
 Jyeṣṭhapura 107-09
 Kabul 67, 76
 Kāca 65, 149
Kaḍā 141, 144
 Kadamba dynasty 81, 92, 94, 134
 Kadphises II 148
Kahāpaṇa 10, 21-23, 34, 36, 40, 42-44,
 47, 49, 54, 132, 157
Kāka 141
Kākaṇi 23, 42
Kākaṇikā 141-42
Kākini 8, 144
Kākinīyika 8
 Kakṣivāt 17
 Kalabhra clan 95
 Kalacuri clan 65, 81, 92, 94-95, 98,
 134
 Kalacuri-Cedi era 74
 Kalaikuri 143
Kāla-kahāpaṇa 44
 Kalalāya 88
Kalanju 80, 82-83, 92, 137
Kalasa 91
 Kala, S. C. 128
 Kalhṇa 150
 Kaliṅga 39, 81, 92, 95, 112
Kalita 142
Kalpadrakośa 39
 Kalyāṇa 81, 92-93, 95
 Kalyāṇa Cālukya dynasty 134
 Kamara 76
Kaṁsa 40
 Kanakasabhai 50
 Kanara 81, 89, 92, 94
 Kanauj 59, 66, 74, 76, 120
 Kāñcī 95
 Kane, P. V. 151
 Kangle, R. P. 155, 158
Kāni 141
 Kaṇiṣka 67, 148
 Kannaḍa 93, 95-96
 Kāṇva 108
Kapardaka 145
Kapardaka-purāṇa 145-46
 Kāpiśi 147
 Kārdamaka- Mahākṣatrapa 119
 Karimnagar District 91
 Karka 32
 Karṇāṭa 69
 Karnataka 134-35, 138
Karṣa 23, 33, 34, 37, 41-42, 46
Kārṣāpaṇa 9, 23, 26, 32, 34, 36-37,
 39-47, 49-50, 54, 58, 80, 82-83,
 121, 132, 141, 155, 157-59
 Kārttikeya 65
 Karwar 88-90
Kasabikanam 103
 Kashmir 65, 67-68, 79, 97
Kāśikā 24, 26-27, 34, 36, 159
 Kāśi-mahājanapada 53
Kāśu 80, 98-100, 137
 Katare, S. L. 108-09, 113
Kāthaka Saṁhita 18, 37-38
Kathāsaritsāgara 151
 Kathiawad 113
 Kātyāyana 31, 44, 46
Kātyāyana Śrautasūtra 32, 36, 38
Kātyāyana Vārttika 36

- Kauṇḍinyapura 112
 Kauśāmbī 9, 56, 59, 101, 103-07, 123, 129, 147
 Kauṭilya 24, 26, 33, 40-42, 45, 49, 141, 154
Kavaḍi 145
 Kedāra Kuśāṇa 34
 Keith 16-17
 Kekaya 19
 Kennedy 18
 Kerala 97-98, 100
 Keśava 39
 Khāravela 24, 112, 159
 Kharoṣṭhī 59-60, 87, 109
 Khiṅgila 67-68
 Khudavayaka 76
Kidāra 67-68
 Kīrtivarman 74
 Kish 28
 Kodur 93 ; hoard 136, 138¹
 Kolhapur 47, 88-89
 Kondapur 87-90
 Koṅgudeśa 69, 79, 97
 Koṅkaṇa 66, 71, 73, 82, 85, 91
 Kośa 17
Kosabi 59
 Kosala 31, 53, 64, 66, 70-71, 74 ; mahājanapada 52
 Kracmer, Augustin 107
 Kramāditya 70
 Kramer, S. N. 14
 Krishna Deva 122, 124, 127
 Krishna District 85, 90, 135
Krorpati 25
Kṛṣṇala 18, 21, 23, 30-31
 Kṛṣṇarāja, Kalacuri chief 95
 Kṛṣṇarāja, Rāṣṭrakūṭa king 71
Kṛṣṇarāja-rūpaka 134, 153
 Kṛṣṇā river 78
 Kṛṣṇa Vāsudeva 100
 Kṣaharāta Nahapāna 118
 Kṣatrapa 44, 47, 81, 92, 131
 Kṣudraka 21, 47
 Kubja Viṣṇuvardhana 93
Kuhaka Jātaka 26, 151
 Kulottuṅga-cola I 98-100
Kulottuṅga-māḍa 135¹
 Kulūta 61-62
Kulyavāpa 143
 Kumāradevī 65
 Kumāragupta I 64-65, 70-71, 143, 147, 149, 153¹
 Kumārapāla 75
 Kumrahar 6, 56, 122, 124-25
 Kuṇinda 60-62
 Kura 88-89
 Kurara 107-08
 Kurumbara 86, 95
 Kuśa 20
 Kuśāṇa 63-68, 79, 125, 142, 148, 158
 Kuśāṇa coins 5
 Lahiri, A. N. 3-6, 8, 10, 48
 Lahiri, Sm. B. 3-5, 78
Lakhpāti 25
 Lakṣaṇa 24
Lakṣaṇādhyakṣa 24, 155, 157
 Lakṣmaṇa 20
 Lakṣmaṇasena 145
 Lakṣmī 61, 66, 69
lāñchana 95-96
 Larkana District 15
 Lava 20
 Law, B. C. 157
Lekhapaddhati 156-57
Lilāvati 141, 144
Lokki gadyāṇa 139
 London 131-32, 134, 139, 142
 Lothal 14
 Lucknow 52, 58 ; Museum 32, 45
lupa (rūpa) 159
Lupadakha (Rūpadakṣa) 159
 Macdonell 16-17
 MacDowall, D. W. 74
Māḍa, Māḍai 98, 137-38
 Madanapāla 75-76
 Madanavarman 74
 Madanpada plate 145
Māḍha 37

- Madhainagar 145
 Mādhava 76
 Madhipura 122
 Madhuri 124
 Madhya Bharat 81, 85, 92
 Madhyadeśa 29
 Madhyamikā 61-62, 109 ; janapada 55
 Madhya Pradesh 59, 70, 84
 Madras 84, 99, 135-40 ; Government Museum 115, 137
 Madura, Madurai 92, 96, 136
Madurāntaka 99
 Magadha 55, 64, 122, 124-25
Magan 14
Mahābhārata 25-26, 33, 35-36, 38-39, 44
Mahābhāṣya 25, 35, 43, 155
Mahāgrāmika 88, 90
 Mahalingam, T. V. 3-4, 139
 Maharashtra 47, 71, 85, 89, 91, 111-12, 134
Mahārāṣṭrīn 90
Mahārāṭhi 88-89
 Mahāsena 147
Mahāsenāpati 88, 90
 Mahasthan 141 ; inscription 8, 142
Mahāsupina Jātaka 159
Mahāvagga 24, 158-59
 Mahendrāditya 70
 Maheshwar 105, 123
Māheśvara 147
 Mahīpāla 66, 76, 144
 Mahiṣa 89, 100
 Māhiṣmatī 59, 107-08
 Maitraka dynasty 66, 71
Maitrāyaṇī Saṁhitā 18
 Maitreya, A. K. 144
 Maity, S. K. 11
 Majhamikā 62
Majjāṭikā 80
 Majumdar, R. C. 10, 141, 145, 152-53
 Majumdar, R. P. 10
mākaṇaṣa 87
 Makran coast 14
 Mālava clan 21, 47, 61-62
 Malavalli inscription 89
 Mallasarul plate 144
 Mallikārjuna 97
 Mallowan, M. E. L. 14
 Malwa 72, 85, 87, 111-14, 119
 Māna 17-18, 30, 89
 Maner 120, 124 ; hoard 122-23, 126
 Maniāri-pāṭaka, Maṇiāri-pattalā 120
Mañjāḍī 80
Mañjeṭṭhi 80
 Mannargudi Taluk
 Manu 10, 21, 23, 27-28, 30-31, 36, 40-42, 46, 49
 Marshall, J. 101
Māsa 10, 23, 25, 34, 36, 43, 45
Māśaka 10, 23, 34, 42, 44, 47, 80
Māśaka-rūpa 159
 Maski 88-89
Mātharīputra 90, 147
 Mathurā 52, 59-61, 123, 147
 Maukhari dynasty 64, 66, 71
 Maurya 49, 52, 83
Mayūra-gadyāna 139
 McCrindle, J. W. 142
 Medak District 87
 Mehi 29
 Meluhha 14
 Mesopotamia 13-14
 Mihirakula 67-68
 Milinda (Menander) 22
Milindapañho 22
 Minhājuddīn 145
 Mirashi, V. V. 89-90
 Mishra 122, 124-25
 Mithilā 26
 Mohenjodaro 15
 Monghyr District 72
 Monier-Williams 44
 Montgomery District 15
 Moraes 97
 Mother-goddess 29
Mṛcchakaṭika 151

- Mrgabhūti 60
 Mukhopadhyay, Sm. M. 3
 Mūlaka 82
 Muralīdhara 100
 Murshidabad 149
 Mymensingh 141
 Mysore 81, 84, 88-89, 92, 94, 100, 241
 Nāḍol 76
 Naga 28
 Nāganikā 88, 132
 Nagapattinam 136
 Nagari 55, 66, 72, 94, 96, 98
 Nāgārjunikoṇḍa 90, 104, 148 ; inscription 4
 Nahapāna 6, 86, 114-15, 117, 132, 147, 150
 Naihati plate 145
 Naiṣkika 155
 Nala dynasty 70
 Nālandā plate 144
 Nalgonda District 91
 Nānāghaṭ 88 ; inscription 132
 Nānaka 155
 Nāṇakapurikṣin 155
 Nanda 45, 52
 Nandangarh 124
 Nandipada 60
 Nārada 21, 23, 40, 50
 Nāradaśmṛti 9
 Narain, A. K. 125, 128
 Narendrāditya 67-68
 Nasc 27
 Nasik 86 ; cave inscription 41, 44, 46, 132-33, 137 ; District 85
 Navdatoli 105, 123
 naxy 28
 Nayar, T. B. 137
 Nearchus 56
 Negama 101-06, 110, 130
 Nelcynda 80
 Nellore 93 ; District 94, 135
 Nepal 54
 Nevāsā 111-12
 New Hebrides 11
 Nidānakathā 21, 47
 nidhi 151
 Nigama 9, 106
 Nikkha 17, 28
 Nīla-kahāpaṇa Nīla-kārṣāpaṇa 9, 44
 Nisar coin 70
 Niṣka 16-20, 23-30, 34-36, 38-39, 142, 144
 Niṣka-dhana 25
 Niṣka-grīva 16, 28
 Niṣka-mālā 27
 Niṣka-sahasrika 25
 Niṣka-śatika 25
 niṣkraya 19
 North Arcot District 136
 Northern India 32, 50, 54, 56, 65-67, 71, 79-80, 83, 100, 102, 104, 131
 North-Western India 66-67, 72, 75
 Nusc 28
 Nyagrodha 151
 Ohind 67, 75
 Oppenheim, A. L. 14
 Orissa 37, 82
 Pāda 25-27, 30, 35, 42-44
 Pāḍali 120
 Pāda-niṣka 26
 Pādārdha-Śatamāna 19, 32
 Pāda-Satamana 19, 32
 Padma-śaṅka 78-79, 92-94
 Pagoda 79-80, 94-96
 Paharpur plate 143
 Pahlavī 72
 Paila hoard 27, 31-32, 52, 54
 Pakistan 54, 101, 141
 Pala 23, 38
 Palaeolithic period 11
 Pāla dynasty 73
 Palam 135
 Pāli-dhvaja 92
 Pallava 81, 86, 91, 95-96
 Pañcanekame, Pañcanigama 102-03, 106, 129
 Paṇa 26, 36, 42, 44, 49, 80, 83, 121-22, 138, 144, 154-55
 Paṇam 80

- Paṇa-niṣka* 26
Pāṇḍya 81-83, 92, 94-99, 134-35
Pāñcāla 45, 59-60, 71
Pañcaśānya, *Pañcaśānya* 33
Pañcaviṃśa Brāhmaṇa 17, 38
Panika-Senī (Pārṇika-S'reṇī) 104, 106
Pāṇini 19, 24-26, 32-36, 40-41, 43-45
Pannika 104, 106
Pantaleon 47, 105
Paramabhāgavata 147
Paramardin 74
Pāraupatha 156
Pārikṣika 154
Parimaṇḍala 157
Pārūpatha-dramma, *Pāruttha-dramma* 136, 156
Patañjali 25-26, 33-34, 43, 155, 159
Pathak, V. S. 29
Patna 120, 124, 129-30
Pattukkotai Taluk 137
Paunī 111-12
Paurūthi-dramma 136
Pausanius 22
Pearse 128
Pelew Islands 107
Peninsular India 78
Penzer 151
Periplus of the Erythraean Sea 46, 80, 139, 142
Persia 46, 72
Persian Gulf 14 ; seals 14
Petluripalem 148
Philip Aridaeus 31
Piggot, S. 35
Pinagra 124
Poona 136
Poruttha-dramma 136
Prabandhakośa 155-56
Prakrit 84, 86, 147, 158
Prasannamātra 70
Pratāpaśīla-Prabhākaravardhana 71
Pratī 41, 44
Pratīka 44
Pravarasena 68
Prthuvīra 144
Prthuvīraja (Pṛthuvīrya) 70
Pṛthvī 64
Prthvīrāja 76
Pṛthvīrājaviṣaya 156, 158, 160
Prthvīvarman 74
pudu 135
Pulumāvi 85-86
punch-marked coins 5-7, 9, 18, 31-34, 37, 39-42, 45, 49-51, 53-58, 77, 81-83, 87, 96, 100, 102-03, 110, 120-22, 124-25, 132-33, 141, 150, 157
Punjab 16, 22, 29, 60-62
Punyaviṣaya 158
Purāṇa 10, 23, 36-37, 42, 46, 49, 145-46
Purātanaprabandha-saṅgraha 156
Purī-Kuṣāṇa coins 5
pūrṇa-kumbha 71
Pusalker, A. D. 3
Puṣkalāvātī 109, 147
Puṣyabhūti 64, 66, 71
Raigarh District 86
Rai, J. 3
Rairh 110
Rājagaha (Rājagrha) 44
Rājghaṭ 123, 127, 129-30
Rājgir 45, 105, 122, 124
Rājātila 69
Rājanya 62
Rājarāja II 99
Rājarāja-cola 94, 98, 100, 138
Rājarāja-māḍa 135, 137
Rājarājan-māḍai 137
Rajaśekhara-sūri 155-56
Rajshahi 144
Rajasthan 5, 13, 60, 62, 66, 72, 157, 149
Rajata 20, 30
Rājatarāṅgiṇī 67-69, 150
Rājendra 99-100
Rājendra Kulottuṅga I 94
Rajput 72

Rajputana Museum 157
 Rājyapāla 145
Raktikā 21, 23, 30, 41-42, 45, 80
Ralimasa 102
 Rāma 20
 Rama Rao, M. 91, 96, 111, 115-16, 131, 135
Rāmāyaṇa 19-20
 Ramayya, S. 113
 Ramchandran, T. N. 108
 Ramnad (Ramanathapuram) 96, 136
 Ramnagar 66, 71
 Ranade, R. V. 113
 Rañjuvula 47, 61
 Rao, Dinkar 113
 Rao, N. Lakshminarayana 98
 Rapson, E. J. 86, 95, 97, 100, 109, 113-14, 116, 131, 150
Rāṣṭrakūṭa 71, 76, 95
 Raverty, H. G. 146
 Rawalpindi 101
 Ravi 17
 repousse coin 70
Rgveda 16-17, 24-25, 28, 38
 Rhys Davids 21-23, 40, 125, 128
 Richards, F. J. 139-40
 Ring money 13
 Roman—coins 4 ; empire 6
 Rome 12
 Rudra 17, 24
 Rudradāmaka 9, 44
 Rudradāman I 119
 Rudrapuruṣadatta 91
Rūpa 10, 21, 24, 47, 128, 155, 158-60
Rūpadarśaka 10, 24, 154-55
Rūpaka 142-44, 158-60
 Rupar 29, 123
Rūpasutta (Rūpasūtra) 159
Rūpatarka 155
 Rupee 148
Rūpika 154
Rūpya 24
Rūpyādhyakṣa
S'abdamālā 39

Sabina 148
 Sadakaṇa 88-89
 Sadakaṇa Cuṭukaṇha Mahārāṭhi 88
 Sadakaṇa Kalalāya Mahārāṭhi 88-89
 Sadakana Kaṇha Mahārāṭhi 88
Sādavāhana 87
Saḍviṃśa Brāhmaṇa 37
 Sagama family 88
 Sāhī 67, 75-76 ; Tigin 72
 Śaka 89-90, 147, 149 ; currency 6
 Kṣatrapas 113, 119 ; Satrap 61, 148
 Śākambharī 74, 76
 Saktipur 145
 Śaktivarman 94
 Śālaṅkāyana 91
 Salem 97, 139-40
 Sallakṣaṇavarman 74
 Samācāradeva 144 ; Narendrāditya 69
 Sāmantadeva 75-76
Samantapāsādikā 37, 44
Sāmavidhāna 41
Sampattisamarpaṇa 10
Sampurnanand Volume 106
 Samudragupta 64, 147, 149
 Śāna 19, 32-33, 38-39
 Sanchi 149
 Saṅgama dynasty 90
Saṅgha 159
 Sankalia, H. D. 112, 123
 Śaṅkaragaṇa 95
 Śaṅkaravarman 68
 Sankisa 123
Sannidhāt 154
 Saran District 149
 Saraswati, S. K. 143
 Sargon 14
 Śarvavarman 71
 Śaśāṅka 69, 144
 Sassanian 65-68, 71-73 ; type of coin-5
 Sastri, H. P. 145
 Sastri, K. A. Nilakanta 135, 137-38

- Sātakānām* 89
Śātakarṇi II 111
Śātakarṇi coins 112
S'atamāna 18-19, 23, 27, 29-33, 35-39
S'ata-niṣka-dhana 25
S'atapatha Brāhmaṇa 19, 25-27, 30, 36-38
Satara District 82
Śātavāhana—dynasty 4, 41, 50, 78, 80-81, 84-90, 95, 105, 112-13, 115-19, 131-33, 147 ; coins 6
Satrap (see under *Śaka* Satrap) 84, 86-87
Saucer-like coin 50-54, 56
Sauvarṇika 156
Satyadharmasthita 147
Schoff, W. H. 139, 142
Scythian 147
Sepoy Mutiny 150
Shāh 'Ālam II 149
Shamasastri 45, 141
Sharma, G. R. 123, 128
Shastri, A.M. 3-6, 113
Shukla, S. M. 113
Siam 94
Śibi 55, 61-62, 109
Siddhāntavāgīśa 151
Siddhi 93
Sigloi 31
Śīlāditya-Harṣavardhana 71
Śīlāhāra dynasty 73, 134, 136
S'ilappadikāram 50
Siṃha 63
Simpson 148
Simuka 87
Singavaram hoard 82
Singh, J. P. 3, 7, 9-10, 101, 128
Singh, S.P. 3-4, 6, 8, 10, 120
Sinha, B. P. 128
Sippikā 42
Sircar, D. C. 3-4, 6, 8-10, 19, 29-30, 36-39, 44, 46, 69, 79, 87, 90, 100, 102-04, 112-13, 117, 124, 132, 140-45, 147-48, 150-51, 153, 156-57
Sirkap 101
Sirsukh 101
Śiva 69
Śivabodhi 92
Śivadatta 60-61
Śivaghoṣa 61
Śivapālita 60
Siyadoni 73
Skandagupta 49, 64-65, 70-72, 149, 153
Skanda-Kumāra 147
Small copper coins from Rajghat 8
Smith, V. A. 18, 77, 100, 102, 144
Śoḍāsa 61
Soliya-Kāśu 135
soma 12
Somaladevī 73
Somalekhā 73, 160
Somavarmśī 70
Someśvara I (Trailokyamalla) 93
Someśvara II (Bhuvanaikhmalla) 93, 95
Sonepur 32, 82, 122, 124, 129-30
Sopara 86
South Arcot 136
Southern India 50, 78-83, 94, 131-44, 138 ; coins 4, 9
Śpalapatideva 75-76
Spooner 102
S'reṣṭhi-Gambhuvaka-dramma 9
S'ri 87, 92-93*
Śrī-Candra-Śāti 85
S'ri-Cittarājadeva 73
S'ri-Dāman 73
Śrī-Lakṣmī 63
S'ri-Oṃkāra 73
Śrī-Rudrapuruṣadatta 90
Śrī-Śātakarṇi 111
Srivastava, B. 38
S'rivatsa 83
S'ri-Vigraha 72-73
Śrī-Yajña Śātakarṇi 116
Stein 29
Strassburg 102

- Strato 47
Stūpa 148
 Subba Rao, B. 123
 Subrahmanyam, R. 134
 Sudavapa 62, 110
 Sudhanyāditya 70, 144
S'ukranīti 46-47
 Sultanpur 58, 82
 Sumer 13
 Sumeria 14
Śunaḥśepa 19
 Sundarban 145
 Surāṣṭra 85
 Sūryamitra 109-10
 Suvarṇa 8, 18, 20, 23, 26-28, 30, 33-35, 40-41, 46, 49, 132-33
Suvarṇādhyakṣa 155
Suvarṇa-māṣaka 8, 34
 Suyajña 20
Suyamītaśa 110
 Svaidāyana 26
Svastika 83, 89, 97, 112, 123
Tabaqāt-i-Nāsirī 146
 Tagore 10
Tahiriya Dirham 134
Taittirīya Brāhmaṇa 18-19, 36
Taittirīya Saṃhitā 18, 38
 Takṣaśilā 31, 59 ; hoard 32
 Tamil 78, 98, 100 ; Nadu 134-39
 Tamluk 124
Tāmra 20
 Tanjore 136-37
Taṅka 69
Taṅkapati 155
 Tarhala 84 ; hoard 85, 112
 Tarpandighi plate 145
Tatariya Dirham 134
 Tawney 151
 Taxila 5, 8-9, 31, 51-52, 57, 101-06, 109, 122-23, 129-30
 Tel-Asmar 13
 Telugu 95-96
 Telugu-coḍa 94, 134
 Terrien de Lacouperie 128
 Thakur, Upendra 21, 40
 Thalikattai 137
 Thana 139
 Thanjavur 136-37
 Thaplyal, K. K. 3-5, 7-10, 106, 127
 Tigris 14
 Tinnevelly 136
Tiru, Hiru, for S'rī 87
 Tirunelveli (Tinnevelly) 136 ; District 96
 Tomara 74-76
 Toramāṇa 67-68, 71
 Traikūṭaka 81, 91, 131
 Trailokyavarman 74
 Trajan 148
 Travancore 80
 Trigarta 62
Tri-naiṣkikam 25
Tri-niṣkam 25
 Tri-pāda 52
 Tripurī 59, 107-09, 123, 147
Trisūla 68
 Trivedi, H. V. 108, 113
Trivīmśatikā 45
Trivṛtta 29
Udaya Jātaka 34
 Uddālaka 26
 Uddehika 62
 Uddehaki 108, 110
 Ujenī 59
 Ujjain 101, 105, 123
 Ujjayinī 9, 59, 107, 129
Upagīti 64
Upajāti 64
 Upāli 159
Uposatha 159
 Ur 14, 28
 Ur-Nanshe of Lagash 14
 Uruli hoard 136
 Uṣā 17
 Usavadāta 44
 Utpala 68

- Uttama-cola 99
Uttamagaṇḍamāḍa 135
 Uttar Pradesh 59, 72-73
Vācaspatya 50
vāhana 63
Vahitti 87
Vaidyakaparibhāṣā 39
Vaijayantī 39
 Vaimaki 61-62
 Vaingāṅgā 111
 Vainyagupta 143
 Vaiśālī 122
Vājasaneyi Samhitā 19, 30, 36
 Vajji 159
 Vakkadeva 76
 Valabhī 71
Vaiśasthavila 64
Varāha 80, 92-94
 Varāharāja 70
 Vārāṇasī 53, 59, 69, 107-08, 110, 120, 129-31, 137
 Varman 145
 Varthema 139
 Vasiṣṭha 19
Vāsiṣṭhi 87
 Vāsiṣṭhīputra—Pulumāvi 87, 113, 115-17, 119 ; Śātakarṇi 87, 113, 115-17
 Vāsudeva 65
Vaṭasvaka 102, 105
 Venāḍu 98
 Veṅgī 81, 92, 94, 100
 Vesālī (Vaiśālī) 159
Vessantara Jātaka 26
 Vibhindu 16
 Vidarbha 111-12
 Vidiśā 59
 Vidya Prakash 96, 100
 Vighrahapāla 73, 144
 Vighrahātūṅga 73
 Vijayanagara 79, 92, 97, 139
 Vijayapura 124
 Vijayasena 144-45
 Vikramāditya VI 93
 Vikramam 136
 Vilivāyakura 47
 Villavan (Cera king) 98
Vimśatikā 44-45
Viṇā 63
Vinayapiṭaka 22, 44, 128, 159
 Vināyakapāla 73
 Vindhya 78
 Vīrabodhi 92
 Vīra-Keralavarman 98
 Vīrapuruṣadatta 91
 Vīrasena Kramāditya 69
 Vīravarman 74
Viruda-māḍa 135
 Viśākha 147
 Viśala 156
Viśalapriya-dramma 156
Viśamasiddhi 93-94
 Viṣṇu 18, 21, 23, 40-41
 Viṣṇu (Vāsudeva) 73
 Viṣṇukunḍin 81, 91, 96
Viṣṇupada 100
Visuddhimagga 104, 155, 157
 Viśvamalla 156
Viśvamallapriya 156
 Viśvāmitra 19
Viśvarūpa 24
 Viśvarūpasena 145
Vṛṣa 68
 Vṛṣṇi 61-62
 Vyāghrasena 91
Vyāji 154
Vyavahārabhāṣya 104
Vyavahārika-S'ṛeṣṭhi-Gambhuvaka-dramma 139
 Wai 82
 Walker, Francis A. 14
 Walsh 102
 Warmington, E. H. 133
 Western India 71, 87, 91, 111-12, 147-49
 Wheeler, R. E. Mortimer 16, 100
 wheel-marked coin 50-53, 56, 81
 Wilford 142



INDEX

175

Wilson 18
Yādava 134
Yādavaprakāśa 39
Yajñasrī 25-86
Yājñavalkya 18-19, 27, 36, 41-42
Yājñavalkyasmṛti 155

Yakṣa 151
Yamunā 92
Yaśodāman I 91
Yasa 159
Yuddhamalla 14
Yaudheya 61-62, 109

05/2/04

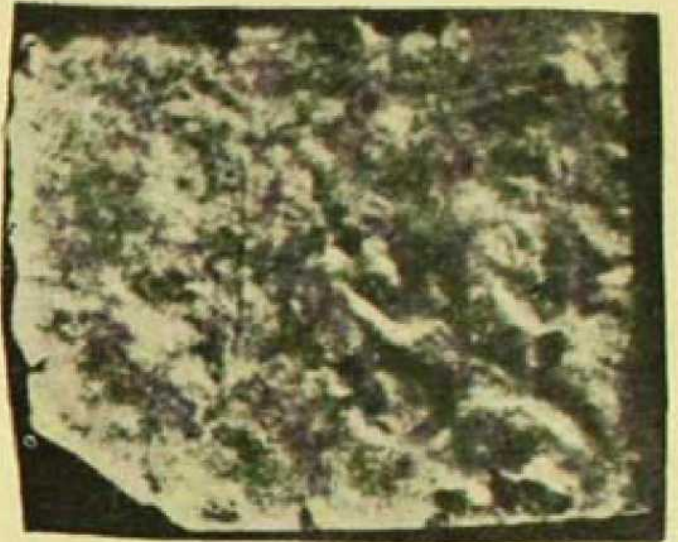
ADDENDA ET CORRIGENDA

Page	5, line 12.—	<i>Read</i> —Taxila
„	30, line 25.—	<i>Read</i> — <i>dakṣiṇā</i>
„	39, line 13.—	<i>Read</i> — <i>S'āna</i>
„	42, line 25.—	<i>Read</i> — <i>Kākaṇi</i>
„	50, 2nd note.—	<i>Add</i> —The Cālukya gold coins are often supposed to have been imitated from the <i>Padma-taṅkas</i> of the Kadambas (below, pp. 92, 94).
„	63, lines 5, 28, 29.—	<i>Read</i> —Kuṣāṇa
„	68, line 3.—	<i>Read</i> —silver coins of Mihirakula
„	69, note, line 2.—	<i>Read</i> —Karnāṭa
„	70, 1st note.—	<i>Omit, and read</i> —Generally read as <i>Pṛthuvīra</i> , though the correct name seems to be <i>Prthubala</i> .
„	75, lines 6ff.—	<i>Add Editorial note</i> —King Ajaya could be called both Ajayarāja and Ajayadeva.
„	86, line 26.—	<i>Read</i> —Raigarh District
„	87, lines 29ff.—	<i>Add Editorial note</i> —Śātavāhana was another name of Simuka. It is interesting that the Śātavāhanas issued coins with legends unlike their Śuṅga and Kāṇva predecessors. This may be due to their close connection with the foreign rulers of Western India.
„	89, line 29.—	<i>Add Editorial note</i> — <i>Read</i> —independent, <i>for</i> —semi-independent
„	90, line 22.—	<i>Add Editorial note</i> — <i>Read</i> —semi-independent, <i>for</i> —independent.
„	99, line 5.—	<i>Read</i> —Kulottuṅga-cola
„	100, note.—	<i>Add to the Editorial note</i> —Cf. 1138 coins from Bodinaikkanur (Madurai District); 'a large number' from Coimbatore; nearly 8000 from Dharanikota (Amaravati, Guntur District); 770 from Mambalam (Madras); 'a potful' from Penar (Coimbatore District); 991 in 1907 and 1375 in 1925 from Vembavur (Tiruchirapalli District); etc.
„	102, line 20.—	<i>Read</i> —Buddhaghoṣa
„	103, line 32.—	<i>Read</i> —Bandyopadhyay
„	135, line 23.—	<i>Read</i> —Karnatak
„	141, line 11.—	<i>Read</i> —submultiple

PLATE I



1



2



3



4



5



6



7



8

No. 1.—Coin of Śrī-Śātakarṇi (p. 111).
 Nos. 2-8.—Coins from Maner Hoard (p. 120).

PLATE II



1



2



3



4



5



6



7



8



9



10



11



12



13



14

Nos. 1-14.—Coin Devices on Clay Lumps (p. 127).